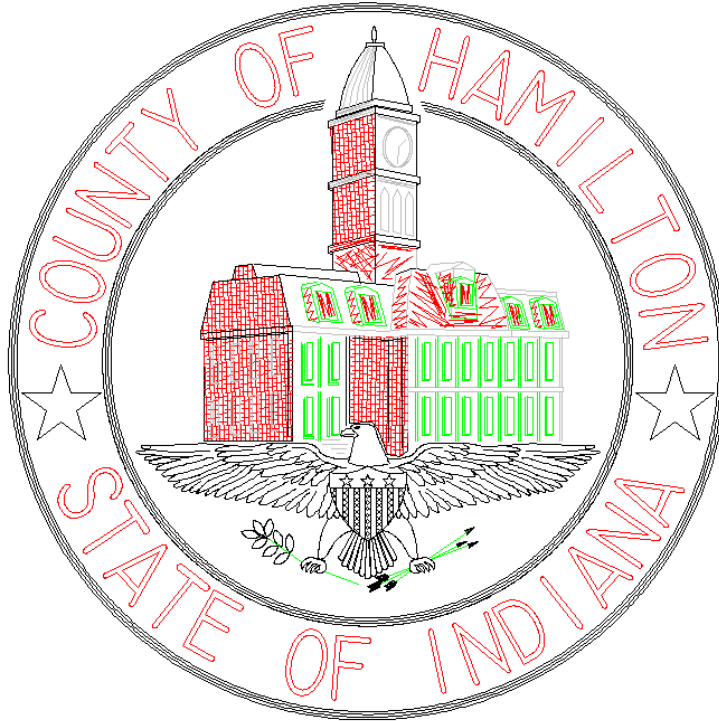


## CONTRACT DOCUMENTS AND SPECIFICATIONS



### HAMILTON COUNTY BRIDGE #72 BRIDGE REHABILITATION

266<sup>TH</sup> STREET OVER CICERO CREEK

HCHD # PB – 18 – 0006  
JACKSON & WHITE RIVER TOWNSHIPS  
HAMILTON COUNTY, INDIANA

**PREPARED BY:**  
**DLZ INDIANA, LLC**  
138 North Delaware Street  
Indianapolis, Indiana 46204



**PREPARED FOR:**  
**HAMILTON COUNTY**  
**HIGHWAY DEPARTMENT**  
1700 South 10<sup>th</sup> Street  
Noblesville, Indiana 46060

**SPECIFICATIONS FOR HAMILTON COUNTY BRIDGE NO. 72  
BRIDGE REHABILITATION  
266<sup>ST</sup> STREET OVER CICERO CREEK  
HCHD # PB 18 – 0006  
JACKSON & WHITE TOWNSHIPS  
HAMILTON COUNTY, INDIANA**

September 1, 2021  
Certified by:



A handwritten signature in black ink that reads "Brian M. Smith".

Registered Engineer No. 10100213  
State of Indiana  
DLZ Indiana, LLC



A handwritten signature in black ink that reads "David B. Henkle".

Registered Engineer No. 11300252  
State of Indiana  
DLZ Indiana, LLC



A handwritten signature in black ink that reads "Michael A. Kummeth".

Registered Engineer No. 910382  
State of Indiana  
DLZ Indiana, LLC

**PREPARED BY:  
DLZ INDIANA, LLC  
138 North Delaware Street  
Indianapolis, IN 46204**



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**NOTICE TO BIDDERS AND CONTRACTORS**

Notice is hereby given that the Board of Commissioners of Hamilton County, Indiana, hereinafter referred to as the Owner, will receive sealed bids for the following project:

---

**REHABILITATION PLANS BRIDGE 72  
266<sup>TH</sup> STREET OVER CICERO CREEK  
JACKSON & WHITE RIVER TOWNSHIP, HAMILTON COUNTY, INDIANA  
PB-18-0006**

---

Proposals may be forwarded individually by registered mail or delivered in person, addressed to the Hamilton County Auditor, 33 North 9<sup>th</sup> Street, Suite L21, Noblesville, Indiana, 46060, until **12:30 p.m., October 11, 2021**. After 12:30 p.m. they can be delivered to the Auditor in the Hamilton County Commissioners Courtroom up to the time of the noticed bid opening. Only proposals from those **CONTRACTORS** who are registered on the Indiana Department of Transportation's current listing of Prequalified Contractors for item D(A) "Bridges: Highway Over Water" will be considered. Any bids submitted by **CONTRACTORS** not approved for this item on the list will be returned to the bidder unopened.

All proposals will be considered by the **OWNER** at a public meeting held in the Hamilton County Government & Judicial Center in Noblesville, Indiana, Commissioners' Courtroom, and opened and read aloud at **1:45 p.m. local time, October 11, 2021**.

The work to be performed and the proposals to be submitted shall include a bid for all general construction, labor, material, tools, equipment, taxes, permits, licenses, insurance, service costs, etc. incidental to and required for this project.

All materials furnished and labor performed incidental to and required by the proper and satisfactory execution of the contracts to be made, shall be furnished and performed in accordance with requirements from the drawings and specifications included in these documents. Bidding documents will be available beginning at **9:00 am. On September 8, 2021**. Copies of the Proposal, Specifications, Contract Documents and Plans must be obtained from Reprographix (<http://reprographix.com/>) or contact David Henkle, P.E. at [dhenkle@dlz.com](mailto:dhenkle@dlz.com) for further information. **Cost for obtaining the Contract Document & Plans from Reprographix will be around \$75.00 without tax.** Payments and costs of Contract Documents are non-refundable. Interested parties can view the Contract Documents online at [www.hamiltoncounty.in.gov](http://www.hamiltoncounty.in.gov). Documents posted on the county website are for informational purposes only. It shall be the responsibility of the individual to periodically check for addendums posted online. Contract Documents and Plans must be obtained through Reprographix to be eligible to bid on this contract.

Each proposal must be enclosed in a sealed envelope with the county supplied sealed bid notice, bearing the title of the project, bid opening date and the name and address of the bidder firmly affixed. **The bidder shall affix identifying tabs to the following sheets of each proposal:**

<i>Form 96</i>	<i>Financial Statement</i>
<i>Non-Collusion Affidavit</i>	<i>Receipt of Addendum (If Applicable)</i>
<i>Bid Bond</i>	<i>Itemized Proposal</i>
<i>Employment Eligibility Verification Certification</i>	<i>Drug Testing Program Compliance</i>

Each individual proposal shall be accompanied by a certified check or acceptable **Bidder's Bond**, made payable to the Hamilton County Auditor, in a sum of not less than **ten percent** of the total amount of the proposal, which check or bond will be held by the said Hamilton County Auditor as evidence that the bidder will, if awarded a contract, enter into the same with the **OWNER** upon notification from him to do so within ten days of said notification. Failure to execute the contract and to furnish performance bond to Hamilton County, Indiana, will be cause for forfeiture of the amount of money represented by the certified check, or bidder's bond, as and for liquidated damages. Form 96, as prescribed by the Indiana State Board of Accounts, shall be properly completed, and submitted with bid proposals. The Commissioners at their discretion reserve the right to waive any and all informalities in the bidding. All bids submitted shall be valid for 90 days from the opening of the bids.

Robin M. Mills  
Hamilton County Auditor

Dated: **August 18, 2021**

Hamilton County Reporter: **Sept 13, 2021 and Sept 20, 2021**

Noblesville Times: **Sept 8, 2021 and Sept 15, 2021**



## &lt; NOTICE &gt;

Sealed Bid Documents shall contain on the outside of the sealed envelope the following completed self-sticking label:

<b>SEALED BID DOCUMENTS</b>	
(To be completed by bidder before submission)	
Equipment Type	_____
Annual Bid Category #	_____
Road Contract # / Bridge # (Desc.)	_____
(Circle One)	
Name of Bidder:	_____
Bid Opening Date:	_____
Other Documents Enclosed:	
Bid Bond	(Y) (N)
Certified Check	(Y) (N)
Form HC BID 06 / 03	(Y) (N)
Form 96	(Y) (N)
Other	_____

<b>For Hamilton County Use Only!</b> <b>Received by the Auditor</b> File Stamp           Time Received: _____
--

All mailer packers will be opened upon receipt.  
Make sure the sealed envelope is contained within.

## &lt; NOTICE &gt;

## **PROPOSAL**

To the Board of County Commissioners of Hamilton County, of the State of Indiana;  
hereinafter referred to as OWNER:

---

**REHABILITATION OF BRIDGE 72  
Jackson and White River Townships  
Hamilton County, Indiana**

---

Pursuant to the legal notice that sealed proposals for the above project would be received by the Board of County Commissioners of Hamilton County, Indiana,

The undersigned hereby tenders this bid to construct the work in accordance with the plans, profiles, drawings, specifications, and all authorized revisions for this contract which are on file in the office of the Hamilton County Highway Department; and to furnish all necessary machinery, equipment, tools, labor and other means of construction and to furnish all material specified in the manner and at the time prescribed and under the supervision and direction of the OWNER or his duly authorized representative and pursuant to the terms of the Performance Bond and the Payment Bond in the amount of not less than One Hundred Percent (100%) of the amount of the Proposal, for the unit prices given on the attached Itemized Proposal dated \_\_\_\_.

Together with this PROPOSAL, the undersigned has:

- A. Filed an Acknowledgment of Receipt of Addendum herewith for each Addendum issued;
- B. Filed an Itemized Proposal with a unit price for each item listed, together with a total amount for all items, based upon the unique characteristics of this contract;
- C. Executed the Form No. 96 filed herewith;
- D. Filed a properly executed Bid Bond or certified check made payable to the Hamilton County Treasurer herewith in an amount greater than or equal to ten percent (10%) of the total amount of this proposal;
- E. Executed the Non-Collusion affidavit filed herewith;
- F. Executed the Legal Status of Bidder Form filed herewith;
- G. Filed a current Financial Statement herewith;
- H. Filed an Employment Eligibility Verification Form herewith;
- I. Filed a Drug Testing Compliance Form herewith.

If awarded the contract, the undersigned promises to prosecute the work so as to complete the contract within the time specified in the Special Provisions.

Witness our hands this \_\_\_\_\_ day of, \_\_\_\_\_ 20\_\_\_\_.

Firm Name : \_\_\_\_\_

Address : \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

By : \_\_\_\_\_  
(Signature)

Name : \_\_\_\_\_  
(Printed)

Title : \_\_\_\_\_  
(Printed)

**ITEMIZED PROPOSAL**

REHABILITATION PLANS BRIDGE 72  
266<sup>TH</sup> STREET OVER CICERO CREEK  
JACKSON & WHITE RIVER TOWNSHIP, HAMILTON COUNTY, INDIANA

**SCHEDULE OF PAY ITEMS**

CONTRACTOR: \_\_\_\_\_ LETTING DATE: \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	INDOT SPEC SECTION	UNITS	QTY	UNIT PRICE		BID AMOUNT	
					DOLLARS	CENTS	DOLLARS	CENTS
1	CONSTRUCTION ENGINEERING	105	LS	1.0				
2	MOBILIZATION AND DEMOBILIZATION	110	LS	1.0				
3	CLEARING RIGHT OF WAY	201	LS	1.0				
4	PAVEMENT REMOVAL	202	SYS	133.0				
5	PRESENT STRUCTURE, REMOVE PORTIONS	202	LS	1.0				
6	GUARDRAIL, END TREATMENT, REMOVE	202	EACH	3.0				
7	EXCAVATION, COMMON*	203	CYS	1280.0				
8	BORROW	203	CYS	2415.0				
9	STORM WATER MANAGEMENT BUDGET	205	DOLLARS	11000.0	1	00	11,000	00
10	STORMWATER MANAGEMENT IMPLEMENTATION	205	LS	1.0				
11	SWQCP PREPARATION	205	LS	1.0				
12	EXCAVATION, FOUNDATION, UNCLASSIFIED	206	CY	113.0				
13	SUBGRADE TREATMENT, TYPE IC	207	SYS	742.0				
14	B BORROW	211	CYS	835.0				
15	AGGREGATE FOR END BENT BACKFILL	211	CYS	30.0				
16	STRUCTURE BACKFILL, TYPE 1	211	CYS	170.0				
17	GEOTEXTILE FOR SUBGRADE TYPE 2B	214	SYS	347.0				
18	COMPACTED AGGREGATE NO. 53	301	CYS	34.0				

19	SUBBASE FOR PCCP	302	CYS	36.0				
20	COMPACTED AGGREGATE NO. 53	303	TON	389.0				
21	WIDENING WITH HMA, TYPE C	304	TON	186.0				
22	MILLING, TRANSITION	306	SYS	838.0				
23	JOINT ADHESIVE, SURFACE	401	LF	1058.0				
24	JOINT ADHESIVE, INTERMEDIATE	401	LF	704.0				
25	LIQUID ASPHALT SEALANT	401	LF	1058.0				
26	HMA SURFACE, TYPE C	402	TON	95.0				
27	HMA INTERMEDIATE, TYPE C	402	TON	53.0				
28	HMA BASE, TYPE C	402	TON	137.0				
29	ASPHALT FOR TACK COAT	406	SYS	1827.0				
30	TERMINAL JOINT, TYPE HMA	503	LF	62.0				
31	GUARDRAIL, REMOVE	601	LF	683.0				
32	GUARDRAIL MGS W-BEAM, 6 FT 3 IN SPACING	601	LF	294.0				
33	GUARDRAIL MGS TRANSITION WITHOUT CURB	601	EACH	4.0				
34	GUARDRAIL, END TREATMENT, OS (31")	601	EACH	4.0				
35	REINFORCED CONCRETE BRIDGE APPROACH, 12 IN	609	SYS	148.0				
36	RIGHT-OF -WAY MARKER	615	EACH	12.0				
37	MONUMENT, B	615	EACH	2.0				
38	BENCHMARK POST	615	EACH	1.0				
39	RIPRAP, REVETMENT	616	TON	396.0				
40	RIPRAP, CLASS 1	616	TON	44.0				
41	GEOTEXTILE FOR RIPRAP TYPE 1A	616	SYS	622.0				
42	MOBILIZATION AND DEMOBILIZATION FOR SEEDING	621	EACH	1.0				

43	MULCHED SEEDING, R	621	SYS	2433.0				
44	WATER	621	M.G.	2.0				
45	SODDING	621	SYS	390.0				
46	PILE, STEEL PIPE, 0.312 IN, 14 IN	701	LF	140.0				
47	CONICAL PIPE TIP, 14 IN	701	EACH	4.0				
48	CONCRETE, A, SUBSTRUCTURE	702	CYS	26.7				
49	FIELD DRILLED HOLE IN CONCRETE	702	EACH	222.0				
50	CONCRETE, C, SUBSTRUCUTRE	702	CYS	45.6				
51	THREADED TIE BAR ASSEMBLY	703	EACH	30.0				
52	REINFORCING BARS, EPOXY COATED	703	LBS	86055.0				
53	CONCRETE, C, SUPERSTRUCTURE	704	CYS	197.5				
54	CONCRETE BRIDGE RAILING TRANSITION, TPF-1	706	EACH	4.0				
55	RAILING, STEEL, PF-1	706	LF	456.5				
56	RAILING, CONCRETE, PF-1	706	CYS	27.0				
57	SURFACE SEAL	709	LS	1.0				
58	STRUCTURAL STEEL	711	LS	1.0				
59	PIPE, TYPE 3, CIRCULAR, 15 IN	715	LF	65.0				
60	PIPE, END BENT DRAIN, 6 IN	715	LF	140.0				
61	PIPE, TYPE 3, CIRCULAR, 8 IN	715	LF	100.0				
62	PIPE, TYPE 3, CIRCULAR, 10 IN	715	LF	95.0				
63	PIPE, END SECTION, DIAMETER 15 IN	715	EACH	2.0				
64	PIPE, END SECTION, DIAMETER 10 IN	715	EACH	1.0				
65	PIPE, END SECTION, DIAMETER 8 IN	715	EACH	2.0				
66	GEOTEXTILE FOR UNDERDRAIN, TYPE 2B	718	SYS	78.0				
67	ROAD CLOSURE SIGN ASSEMBLY	801	EACH	5.0				

68	DETOUR ROUTE MARKER ASSEMBLY	801	EACH	22.0				
69	CONSTRUCTION SIGN, A	801	EACH	19.0				
70	CONSTRUCTION SIGN, B	801	EACH	2.0				
71	MAINTAINING TRAFFIC	801	LS	1.0				
72	BARRICADE, III-A	801	LF	48.0				
73	BARRICADE, III-B	801	LF	72.0				
74	LINE, PAINT, SOLID, WHITE, 4 IN	808	LF	1,490.0				
75	LINE, PAINT BROKEN, YELLOW, 4 IN	808	LF	187.0				
<b>TOTAL</b>								

**PRINTED TOTAL**

\*Paid as plan quantity

SUBMITTED BY:

\_\_\_\_\_

SIGNATURE:

\_\_\_\_\_

PRINTED NAME:

\_\_\_\_\_

TITLE:

\_\_\_\_\_

ADDRESS:

\_\_\_\_\_

**ADDENDUM RECEIPT**

Receipt of the following addenda to the bidding documents is acknowledged (initial each):

Addendum No. \_\_\_\_\_ Dated: \_\_\_\_\_ Initials: \_\_\_\_\_

Addendum No. \_\_\_\_\_ Dated: \_\_\_\_\_ Initials: \_\_\_\_\_

Addendum No. \_\_\_\_\_ Dated: \_\_\_\_\_ Initials: \_\_\_\_\_



**BID BOND**

KNOWN BY ALL PERSONS BY THESE PRESENTS THAT THE UNDERSIGNED:

BIDDER : \_\_\_\_\_  
\_\_\_\_\_

as principal, and

SURETY: [Name] \_\_\_\_\_

[Address] \_\_\_\_\_

\_\_\_\_\_  
as Surety,

are firmly bound unto Hamilton County, Indiana in the full and just sum of an amount equal to TEN PERCENT of the amount of the Principal's bid, to the payment of which, well and truly to be made, we bind ourselves jointly and severally, and our joint and several heirs, executors, administrators and assigns, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATIONS ARE SUCH THAT, whereas, the Principal is herewith submitting a bid and proposal for construction and completion of this contract in accordance with plans and specifications, which are made part of this bond;

NOW, THEREFORE, if Hamilton County shall award the Principal the contract and the Principal shall promptly, enter into contract with Hamilton County, then this obligation shall be void; otherwise to remain in full force, virtue, and effect.

IT IS AGREED that no modifications, omissions, or additions in or to the terms of such contract or in or to the plans or specifications therefor shall affect the obligation of such sureties on this bond.

IN WITNESS WHEREOF, we hereto set our hands and seals:

< <BIDDER > >

(Bid Bond)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Printed)

\_\_\_\_\_  
(Title)

State of Indiana, County of, \_\_\_\_\_, SS:

Before me, the undersigned Notary Public, personally appeared;

\_\_\_\_\_ As Principal and acknowledged the execution of the  
above

bond on this \_\_\_\_\_ Day of \_\_\_\_\_, 20\_\_.

My commission Expires: \_\_\_\_\_

\_\_\_\_\_  
(County of Residence)

\_\_\_\_\_  
(Notary Signature & Seal)

< <SURETY > >

(Bid Bond)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Printed)

\_\_\_\_\_  
(Title)

State of Indiana, County of, \_\_\_\_\_, SS:

Before me, the undersigned Notary Public, personally appeared;

\_\_\_\_\_ As Principal and acknowledged the execution of the  
above

bond on this \_\_\_\_\_ Day of \_\_\_\_\_, 20\_\_.

My commission Expires: \_\_\_\_\_

\_\_\_\_\_  
(County of Residence)

\_\_\_\_\_  
(Notary Signature & Seal)

**PAYMENT BOND**

KNOWN BY ALL PERSONS BY THESE PRESENTS THAT THE UNDERSIGNED:

BIDDER: \_\_\_\_\_

\_\_\_\_\_

as principal, and SURETY:

[Name] \_\_\_\_\_

[Address] \_\_\_\_\_

\_\_\_\_\_

as Surety,

are firmly bound unto Hamilton County, Indiana in the penal sum of an amount equal to ONE HUNDRED PERCENT of the amount of the Principal's bid, to the payment of which, well and truly made, we bind ourselves jointly and severally, and our joint and several heirs, executors, administrators and assigns, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATIONS ARE SUCH THAT, whereas, the Principal is herewith submitting a bid and proposal for construction and completion of this contract in accordance with plans and specifications, which are made part of this bond;

NOW, THEREFORE, if Hamilton County shall award the Principal the contract for work and the Principal shall promptly enter into contract with Hamilton County, for the work and shall promptly make payments of all amounts due to all Claimants, then this obligation shall be void; otherwise to remain in full force, virtue, and effect. Claimant shall mean any subcontractor, material supplier or the person, firm, or corporation furnishing materials or equipment for or performing labor or services in the prosecution of the work provided in such an agreement, including lubricants, oil, gasoline, coal, and coke, repairs on machinery, and tools, whether consumed or used in connection with the construction of such work, and all insurance premiums on said work, and for all labor, performed in such work.

IT IS AGREED that no modifications, omissions, or additions in or to the terms of such contract or in or to the plans or specifications therefor shall affect the obligation of such sureties on this bond.

IN WITNESS WHEREOF, we hereto set our hands and seals:

< <BIDDER > >

(Payment Bond)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Printed)

\_\_\_\_\_  
(Title)

State of Indiana, County of, \_\_\_\_\_, SS:

Before me, the undersigned Notary Public, personally appeared;

\_\_\_\_\_ As Principal and acknowledged the execution of the  
above

bond on this \_\_\_\_\_ Day of \_\_\_\_\_, 20\_\_\_\_.

My commission Expires: \_\_\_\_\_

\_\_\_\_\_  
(County of Residence)

\_\_\_\_\_  
(Notary Signature & Seal)

< <SURETY > >

(Payment Bond)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Printed)

\_\_\_\_\_  
(Title)

State of Indiana, County of, \_\_\_\_\_, SS:

Before me, the undersigned Notary Public, personally appeared;

\_\_\_\_\_ As Principal and acknowledged the execution of the  
above

bond on this \_\_\_\_\_ Day of \_\_\_\_\_, 20\_\_\_\_.

My commission Expires: \_\_\_\_\_

\_\_\_\_\_  
(County of Residence)

\_\_\_\_\_  
(Notary Signature & Seal)

## **PERFORMANCE BOND**

KNOWN BY ALL PERSONS BY THESE PRESENTS THAT THE UNDERSIGNED:

BIDDER: \_\_\_\_\_

\_\_\_\_\_

as principal, and SURETY:

[Name] \_\_\_\_\_

[Address] \_\_\_\_\_

\_\_\_\_\_

as Surety,

are firmly bound unto Hamilton County, Indiana in the penal sum of an amount equal to ONE HUNDRED PERCENT of the amount of the Principal's bid, to the payment of which, well and truly made, we bind ourselves jointly and severally, and our joint and several heirs, executors, administrators and assigns, firmly by these presents.

THE CONDITIONS OF THE ABOVE OBLIGATIONS ARE SUCH THAT, whereas, the Principal is herewith submitting a bid and proposal for construction and completion of this contract in accordance with plans and specifications, which are made part of this bond;

NOW, THEREFORE, if Hamilton County shall award the Principal the contract for work and the Principal shall promptly enter into contract with Hamilton County, for the work and shall well and faithfully do and perform the same in all respects according to the plans and specifications and according to the time, terms, and conditions specified in this contract to be entered into, and in accordance with all requirements of law and shall promptly pay all debts incurred by the Principal or a subcontractor in the construction of the work, including labor, service, and materials furnished, and shall remain in effect at least until one year after the date when final payment becomes due, then this obligation shall be void; otherwise to remain in full force, virtue, and effect.

IT IS AGREED that no modifications, omissions, or additions in or to the terms of such contract or in or to the plans or specifications therefor shall affect the obligation of such sureties on this bond.

IN WITNESS WHEREOF, we hereto set our hands and seals:

< <BIDDER > >

(Performance Bond)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Printed)

\_\_\_\_\_  
(Title)

State of Indiana, County of, \_\_\_\_\_, SS:

Before me, the undersigned Notary Public, personally appeared;

\_\_\_\_\_ As Principal and acknowledged the execution of the  
above

bond on this \_\_\_\_\_ Day of \_\_\_\_\_, 20\_\_\_\_.

My commission Expires: \_\_\_\_\_

\_\_\_\_\_  
(County of Residence)

\_\_\_\_\_  
(Notary Signature & Seal)

< <SURETY > >

(Performance Bond)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Printed)

\_\_\_\_\_  
(Title)

State of Indiana, County of, \_\_\_\_\_, SS:

Before me, the undersigned Notary Public, personally appeared;

\_\_\_\_\_ As Principal and acknowledged the execution of the  
above

bond on this \_\_\_\_\_ Day of \_\_\_\_\_, 20\_\_\_\_.

My commission Expires: \_\_\_\_\_

\_\_\_\_\_  
(County of Residence)

\_\_\_\_\_  
(Notary Signature & Seal)

**NON-COLLUSION AFFIDAVIT**

STATE OF \_\_\_\_\_ )  
 ) SS  
COUNTY OF \_\_\_\_\_ )

The undersigned contractor, being duly sworn, on oath, says that he has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by it, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone, nor to prevent any person from bidding nor to induce anyone to refrain from bidding, and that this bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding in any way or manner whatever.

BY : \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

FOR : \_\_\_\_\_  
(Firm or Corporation)

State of Indiana, County of, \_\_\_\_\_, SS:

Before me, the undersigned Notary Public, personally appeared;

\_\_\_\_\_ As Principal and acknowledged the execution of the  
above

bond on this \_\_\_\_\_ Day of \_\_\_\_\_, 20\_\_\_\_.

My commission Expires: \_\_\_\_\_

\_\_\_\_\_  
(County of Residence) (Notary Signature & Seal)



## **LEGAL STATUS OF BIDDER**

This Proposal is submitted in the name of:

Firm Name \_\_\_\_\_

The undersigned hereby designates below his business address to which all notices, directions or other communications may be served or mailed:

Street : \_\_\_\_\_

City : \_\_\_\_\_

State : \_\_\_\_\_ Zip Code: \_\_\_\_\_

The undersigned hereby declares that he has legal status checked below:

(     )     INDIVIDUAL

(     )     INDIVIDUAL DOING BUSINESS UNDER AN ASSUMED NAME

(     )     CO-PARTNERSHIP (The Assumed name of the partnership is  
registered in the County of \_\_\_\_\_, Indiana.

(     )     CORPORATION INCORPORATED UNDER THE LAWS OF THE STATE OF  
\_\_\_\_\_. The Corporation is:

(     )     LICENSED TO DO BUSINESS IN INDIANA

(     )     NOT NOW LICENSED TO DO BUSINESS IN INDIANA

The name, titles and home address of all persons who are officers or Partners in the organization are as follows:

NAME AND TITLE

HOME ADDRESS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signed and Sealed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

By \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Printed)

\_\_\_\_\_  
(Title)

PROGRESS ESTIMATE  
HAMILTON COUNTY

PROJECT:

HIGHWAY DEPARTMENT  
1700 South 10th Street  
NOBLESVILLE, IN 46060  
(317) 773 – 7770 Office  
(317) 776 – 9814 Fax

PROGRESS ESTIMATE NO.:

PARTIAL ☐

FINAL ☐

PAY NO.	ITEM	UNITS	UNIT PRICE	PLAN QUANTITY	QUANTITY THIS ESTIMATE	QUANTITY TO DATE	EXTENSION

CONTRACTOR : \_\_\_\_\_

BY : \_\_\_\_\_ DATE: \_\_\_\_\_

APPROVED BY : \_\_\_\_\_ DATE: \_\_\_\_\_

APPROVED BY : \_\_\_\_\_ DATE: \_\_\_\_\_

TOTAL EARNINGS TO DATE:

LESS RETAINED PERCENTAGE:

PREVIOUS AMOUNT:

AMOUNT DUE CONTRACTOR :

**HAMILTON COUNTY HIGHWAY DEPARTMENT**

Page: \_\_\_\_\_

**CHANGE ORDER**

Project No. \_\_\_\_\_

Contract No. \_\_\_\_\_

Project Description: \_\_\_\_\_

Change Order No. \_\_\_\_\_

Whereas, the Standard Specifications for this contract provides for such work to be performed, the following change is recommended. (Give location, description and reason)

ITEM NO.	DESCRIPTION OF ITEM	UNIT	UNIT PRICE	INCREASE		DECREASE		% CHANGE	
				QUANTITY	AMOUNT	QUANTITY	AMOUNT	THIS C.O.	TO DATE
	PLACE "EW" FOR EXTRA WORK ITEMS		TOTALS						
	PLACE "FA" FOR FORCE ACCOUNT ITEMS		NET	XXXXXXXX					
				XXXXXXXX	ESTIMATED COST	\$			-

This contract has been extended / reduced (circle one) by \_\_\_\_\_ work / calendar (circle one) days or the completion of \_\_\_\_\_ has been moved to \_\_\_\_\_ to accommodate the changes made in this change order. It is the intent of the parties that this change order is full and complete compensation for the work described above. Notification and consent to this change in plans is hereby acknowledged.

Contractor : \_\_\_\_\_

By: \_\_\_\_\_

Date: \_\_\_\_\_

Submitted for	
Project Engineer	Construction
County Engineer	Highway Director

Title: \_\_\_\_\_

Approved for Hamilton County Highway Department

County Highway Engineer

(Signature)

(Title)

(Date)

## AFFIDAVIT AND WAIVER OF LIEN

· Final · Partial · Payment to Follow

State of Indiana, County of \_\_\_\_\_SS

\_\_\_\_\_ Being duly sworn states that he is the \_\_\_\_\_ of  
(Name of Officer) (Title)

\_\_\_\_\_ having contracted with \_\_\_\_\_ to furnish  
certain materials and/or labor as follows \_\_\_\_\_  
(Description)

for the project known as \_\_\_\_\_

located at \_\_\_\_\_ and owned by \_\_\_\_\_ Hamilton County  
(Owner)

and does hereby further state on behalf of the aforementioned subcontractor/supplier:

(PARTIAL WAIVER) that there is due from the CONTRACTOR the sum of

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_ )

- ( ) receipt of which is hereby acknowledged; or
- ( ) the payment of which has been promised as the sole consideration of this affidavit and Partial Waiver of Lien which is given solely with respect to said amount and which waiver shall be effective only upon receipt of payment thereof by the undersigned:

(FINAL WAIVER) that the final balance due from the CONTRACTOR is the sum of

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_ )

- ( ) receipt of which is hereby acknowledged or
- ( ) the payment of which has been promised as the sole consideration for the Affidavit and Final Waiver of Lien which shall become effective upon receipt of such payment

THEREFORE, the undersigned waives and releases unto the OWNER of said premises, any and all lien or claim whatsoever on the above-described property and improvements thereon on account of LABOR or material or both, furnished by the undersigned thereto, subject to limitations or conditions expressed herein, if any; and further certifies that no other party has any claim or right to a lien on account of any work performed or material furnished to the undersigned for said project, and within the scope of this affidavit and waiver.

\_\_\_\_\_ By \_\_\_\_\_ Title \_\_\_\_\_  
(Firm) (Authorized Representative)

WITNESS MY HAND AND NOTARIAL SEAL this \_\_\_\_\_ day \_\_\_\_\_ of 20\_\_\_\_

\_\_\_\_\_  
(Notary Public)

\_\_\_\_\_  
(Printed)

My Commission Expires \_\_\_\_\_

Residing in \_\_\_\_\_ County

## **CERTIFICATION LETTER**

TO BE COMPLETED BY ALL SUB-CONTRACTORS AND MATERIAL SUPPLIERS

Reference:

---

REHABILITATION OF HAMILTON COUNTY BRIDGE NO. 72  
266<sup>TH</sup> STREET OVER CICERO CREEK  
Jackson and White River Townships  
Hamilton County, Indiana

---

We hereby certify that we have examined the Contract Plans and Specifications for this project and that all materials and workmanship will be in strict compliance therewith.

---

Company Name

---

Address

---

---

By \_\_\_\_\_

(Signature)

---

(Printed)

---

(Title)

Date \_\_\_\_\_

Describe Item of work or material to be furnished:

## **EMPLOYMENT ELIGIBILITY VERIFICATION** **CERTIFICATION**

This Certification is submitted by the undersigned, \_\_\_\_\_, as part of the contract with Hamilton County for the project known as \_\_\_\_\_ entered into on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_. The undersigned affirms under the penalties of perjury that the Contractor does not knowingly employ an unauthorized alien.

The Contractor shall enroll in and verify the work eligibility status of all newly hired employees through the E-Verify program as defined in IC 22-5-1.7-3. The Contractor is not required to participate if the Contractor is self-employed and does not employ any employees.

The Contractor shall not knowingly employ or contract with an unauthorized alien. The Contractor shall not retain an employee or contract with a person that the Contractor subsequently learns is an unauthorized alien.

The Contractor shall require all subcontractors who perform work under its contract, to certify to the Contractor that:

1. The subcontractor does not knowingly employ or contract with an unauthorized alien;
2. The subcontractor has enrolled and is participating in the E-Verify program. The Contractor agrees to maintain this certification at least two years after the term of a contract with a subcontractor.

The County may terminate the contract if the Contractor fails to cure a breach of this provision no later than thirty (30) days after being notified by the County.

The terms of this Certification shall be incorporated within the contract between the Contractor and the County.

Witness this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Contractor: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Signature: \_\_\_\_\_, \_\_\_\_\_  
Title

Printed: \_\_\_\_\_

**Drug Testing Program**  
**IC -4-13-18**

This is submitted by the undersigned, \_\_\_\_\_, as part of the contract with Hamilton County for the project known as \_\_\_\_\_ entered into on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_. The undersigned affirms under the penalties of perjury that the Contractor has a drug testing program in compliance with IC 4-13-18 and the program shall continue during the term of the contract with Hamilton County.

The Contractor shall also require the maintenance of a drug testing program from all subcontractors who perform work under its contract.

The County may terminate the contract if the Contractor fails to comply with the terms of IC 4-13-18 provision no later than thirty (30) days after being notified by the County.

The terms of this requirement shall be incorporated within the contract between the Contractor and the County.

I, \_\_\_\_\_, verify under the penalties of perjury that all requirements of Drug Testing Program per IC 4-13-18 are in compliance:

Witness this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_.

Contractor: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Signature: \_\_\_\_\_,

Title

Printed: \_\_\_\_\_



## **GENERAL PROVISIONS INDEX**

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## **GENERAL PROVISIONS**

### **GP1            CONTRACTOR**

The Firm or Corporation with whom the OWNER has entered into the Construction Contract.

### **GP2            OWNER**

The Board of County Commissioners of Hamilton County, Indiana

### **GP3            ENGINEER**

Hamilton County Highway Engineer or its authorized representative.

### **GP4            COUNTY**

County of Hamilton, State of Indiana.

### **GP5            CONTRACT QUESTIONS**

Submit all questions in writing to David Henkle, P.E. prior to 9:00 a.m. local time September 30, 2021. A written response will be faxed and mailed to the addresses on the Record of Plans Purchased that is required to be filled out by anyone purchasing plans. No questions will be answered by telephone.

### **GP6            PRE-QUALIFICATION AND BIDDING**

Contractor shall meet all the requirements setout in Section 102.00. Only bids from those *CONTRACTORS* who are currently registered on the Indiana Department of Transportation's listing of Prequalified Contractors for items D(A) "Bridges: Highway Over Water" will be considered. Any bids submitted by *CONTRACTORS* not on this list will be returned to the bidder unopened.

### **GP7            EXAMINATION OF THE PROJECT SITE**

Before the bid date, all bidders shall carefully and thoroughly examine the entire site of the proposed work, adjacent premises, various means of approach, access thereto by means of a site inspection visit, and make all necessary investigations to inform themselves thoroughly as to the facilities necessary for delivering, placing, and operating the necessary construction equipment, and for delivering and handling materials at the site, and shall inform themselves thoroughly as to any and all actual or potential difficulties, hindrances, delays, and constraints involved in the commencement, prosecution and completion of the proposed work in accordance with the requirements of this contract. The *CONTRACTOR*, by the execution of the Contract, shall in no way be relieved of any obligation under it, due to his failure to receive or examine any form or legal instrument, or to visit the site and acquaint himself with the conditions there existing. The

*OWNER* will be justified in rejecting any claim based on facts, which he should have noticed as a result thereof.

#### **GP8                    CONTRACT DOCUMENTS**

The Indiana Department of Transportation, Standard Specifications dated 2022 together with most recently published Supplemental Specifications shall be used in conjunction with these Plans, Contract Forms, General Provision, Special Provisions, Modifications to the Specifications, Standard Sheets and any addenda which may be issued for this project.

It is the intent of these Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance therewith. Any work, materials or equipment that may reasonably be inferred will be supplied whether or not specifically called for.

Wherever reference is made to the Indiana Department of Transportation, Director, or Chief Highway Engineer, it shall be interpreted as the Board of County Commissioners of Hamilton County, Indiana.

#### **GP9                    PUBLIC OPENING OF BIDS**

Bids will be opened publicly and read aloud at 1:45 p.m. local time, October 11, 2021 in the Hamilton County Government & Judicial Center in Noblesville, Indiana, Commissioner's Courtroom. Bidders, or their authorized agents, are invited to be present. Any Bids received after 12:30 p.m. local time October 11, 2021 will be returned to the bidder unopened.

#### **GP10                  AWARD OF CONTRACT**

The *OWNER* reserves the right to reject any or all bids or to waive any informalities and to accept the bid, which it deems favorable to the interest of the *OWNER* after all bids have been examined and scrutinized.

#### **GP11                  WARRANTY OF WORK**

The *CONTRACTOR* warrants and guarantees for one year after final acceptance of the contract, to the *OWNER* that all work will be performed, supplied, furnished and installed, and that the work will perform in strict accordance with the Contract Documents and will not be defective. Notice of all work determined or suspected to be defective or not in conformity with the Contract Documents shall be given to the *CONTRACTOR* within reasonable time after observance thereof.

#### **GP12                  NON-DISCRIMINATION**

In compliance with the Acts of Indiana General Assembly, 1933, Chapter 270, the *CONTRACTOR* hereby agrees:

That with respect to hire, tenure, terms, conditions, or privileges of employment of employees for the performance of work, under this Contract, or any Subcontract hereunder, no *CONTRACTOR*,

Subcontractor, nor any person acting on behalf of such *CONTRACTOR* or subcontractor shall, by reason of race, color, religion, sex, national origin, or ancestry discriminate against any citizen qualified to do work to which the employment relates;

That no *CONTRACTOR*, Subcontractor, nor any person on his behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of work under this Contract on account of race, color, religion, sex, national origin, or ancestry;

That this Contract may be canceled or terminated by the *OWNER*, and all money due or to become due hereunder may be forfeited for a violation of the terms or conditions of this section of the Contract.

### **GP13            PRECONSTRUCTION CONFERENCE**

Before the *CONTRACTOR* is issued Notice to Proceed, a conference attended by the *OWNER*, *ENGINEER*, *CONTRACTOR*, and others as appropriate will be held. The purpose of this conference will be to discuss procedures for making submittals, processing applications for payment, and to establish other procedures and understandings bearing upon coordination and performance of the work.

### **GP14            PROOF OF INSURANCE**

*CONTRACTOR* shall not commence work until he has obtained all insurance specified herein, has filed with the *OWNER* one (1) copy of Certificate of insurance, and such insurance has been approved by the *OWNER*.

Should any coverage approach expiration during the Contract period, it shall be renewed prior to its expiration, and certificate again filed with the *OWNER*. If any of such policies are canceled or are changed so as to reduce the coverage evidenced by the Certificate, at least ten (10) days prior written notice by registered mail of such cancellation or change shall be sent to the *OWNER*.

All insurance provided for under this Section shall be written by Insurance Companies licensed to do business in Indiana and countersigned by registered Indiana agent. The insurance company shall file with the *OWNER*, one (1) copy of Affirmation of Authority, on the form furnished by the *OWNER*, as verification of the resident agent.

All insurance shall be maintained in full force and effect until the Contract has been fully and completely performed.

### **GP15            ADDITIONAL INSURED**

Contractor shall submit Certificate of Insurance indicating the above necessary coverage as well as naming *OWNER*, its employees and representatives and *ENGINEER* as Additional Insured on all policies except Worker's Compensation.

## **GP16            INSURANCE**

A. All Certificates of Insurance shall include the following coverages and meet the following requirements:

1. Commercial General Liability Insurance

- a) The CONSULTANT/CONTRACTOR/VENDOR (hereinafter collectively "VENDOR") must obtain and carry Commercial General liability insurance at limits not less than \$1,000,000 per occurrence basis, \$2,000,000 general aggregate. Coverage shall be on an occurrence form and include contractual liability. The policy shall be amended to include the following extensions of overage:
  - i. Exclusions relating to the use of explosives, collapse, and underground damage to property shall be removed.
  - ii. The policy shall provide thirty (30) days notice of cancellation to County.
  - iii. Exclusions for independent contractors and/or exclusions for type of work being performed shall be removed unless the independent contractors has their own insurance policy that is subject to the terms stated herein this Policy. The independent contractor's insurance policy must include, at a minimum, all of the requirements stated herein.
  - iv. The VENDOR shall name the County as an additional insured on a primary and non-contributory basis and shall provide for a waiver of subrogation for the additional insureds.
  - v. The VENDOR shall expressly waive any and all claims of subrogation against the County that arises from existence or performance of the agreement between the VENDOR and the County.

2. Automobile Liability

- a) The VENDOR shall obtain automobile liability insurance covering all owned, leased, borrowed, rented, or non-owned autos used by employees or others on behalf of the VENDOR for the conduct of the VENDOR's business, for an amount not less than \$1,000,000 combined single limit for bodily injury and property damage. The term "automobile" shall include private passenger autos, trucks, and similar type vehicles licensed for use on public highways. The policy shall be amended to include the following extensions of coverage:
  - i. The policy shall provide thirty (30) days notice of cancellation to the County.
  - ii. The VENDOR shall name the County as an additional insured on a primary and non-contributory basis and shall provide for a waiver of subrogation for the additional insureds.

3. Workers Compensation and Employers Liability

- a) The VENDOR must obtain and carry workers' compensation and employers'

liability insurance with policy limits not less than \$500,000 each accident, \$500,000 each employee, and \$500,000 policy limit.

i. In leu of obtaining and carrying workers' compensation and employers' liability insurance independent contractors can fill out and file with the State of Indiana a WCE-1 Application for Workers' Compensation Clearance Certificate (hereinafter "WCE-1 Form"). Once the WCE-1 Form has been approved by the State of Indiana the independent contractor shall upload the certificate of approval to the County's Compliance Vendor prior to entering into any agreement with the County.

b) The policy shall not exclude any owners, partners, or proprietors.

c) Workers' compensation shall include a waiver of subrogation in favor of County and provide thirty (30) days notice of cancellation to the County.

4. Umbrella/Excess Liability

a) The VENDOR must obtain and carry an umbrella/excess liability policy with a combined single limit of \$1,000,000 and provide thirty (30) days notice of cancellation to the County.

b) The umbrella/excess policy may be used to meet the required limits and coverage for the general liability and auto liability policies provided such umbrella/excess liability policy result in the same or greater coverage.

B. The following coverages shall be applicable based upon the services being provided:

1. Professional Liability Insurance

a) The VENDOR must obtain and carry professional liability insurance in an amount of \$1,000,000 per claim and \$2,000,000 aggregate for all claims for negligent performance. When a VENDOR is building or designing a bridge, a building, or any other significant structure the VENDOR must carry professional liability insurance in the amount of \$5,000,000 per claim and \$5,000,000, aggregate for all claims for negligent performance or an additional reasonable amount included in the contract as agreed to by the parties. The VENDOR shall maintain the coverage for a period ending two (2) years after substantial completion of construction or the termination of this contract, whichever is longer. Waiver of subrogation in favor of County shall apply if automatically included in the professional liability policy.

2. Watercraft Liability

a) When necessary to use watercraft for the performance of the VENDOR's Services under the terms of this Contract, either by the VENDOR, or any SUB-VENDOR, the VENDOR or SUB-VENDOR operating the watercraft shall carry watercraft liability insurance in the amount of \$1,000,000 combined single limit for bodily injury and property damage, including protection & indemnity where applicable. Coverage shall apply to owned, non-owned, and hired watercraft.

- b) If the maritime laws apply to any work to be performed by the VENDOR under the terms of the agreement, the following coverage shall be provided:
  - i. United States Longshoremen & Harbor workers
  - ii. Maritime Coverage - Jones Act
- c) The policy shall provide thirty (30) days notice of cancellation to the County.
- d) The VENDOR or SUB-VENDOR shall name the County as an additional insured.

### 3. Aircraft /Unmanned Aircraft Systems Liability

- a) When necessary to use an aircraft for the performance of the VENDOR's services under the terms of this Contract, either by the VENDOR or SUB-VENDOR, the VENDOR or SUB-VENDOR operating the aircraft shall carry aircraft liability insurance in the amount of \$1,000,000 for un-manned aircraft systems and \$5,000,000 for manned aircraft systems combined single limit for bodily injury and property damage, including passenger liability except for unmanned aircraft, and including personal injury coverage.
- b) Coverage shall apply to owned, non-owned, and hired aircraft.
- c) The policy shall provide thirty (30) days notice of cancellation to the County.
- d) The VENDOR or SUB-VENDOR shall name the County as an additional insured.

### 4. Builder's Risk

- a) Should the VENDOR'S services include renovation or new construction, a builder's risk policy insuring the full amount on a replacement cost basis, including soft costs, of the renovation or new construction is required and a Certificate of Insurance evidencing the full limit shall be provided to the County.
- b) The builders' risk shall include the County as an additional insured.

### 5. Installation Floater

- a) Should the VENDOR'S services include installation of equipment into real property, VENDOR shall purchase full replacement cost coverage in the form of an installation floater to cover said property until installed.

### 6. Pollution Liability

- a) Should any of the VENDOR's services involve any one or more of the following services, VENDOR shall carry pollution liability insurance in an amount not less than \$1,000,000 per incident, \$2,000,000 annual aggregate:
  - i. Inspecting, handling or removing asbestos, lead, and/or mold;
  - ii. Treatment, storage, transporting, or disposal of hazardous



wastes; and/or

iii. Soil excavation, earth moving, or subsurface investigation.

#### 7. Cyber Liability

- a) Should any of the VENDOR's services involve any one or more of the following services, VENDOR shall carry cyber liability in an amount not less than \$2,000,000 each claim, \$2,000,000 annual aggregate:
  - i. Payroll services;
  - ii. Employee benefits including retirement plans, health insurance and/or consulting, human resource services, third party administrators;
  - iii. Hardware, software, or other IT services;
  - iv. Legal services that include the handling, storing, or transmitting of personal identifiable information; and
  - v. Medical providers

#### 8. Flow-Down Clause

- a) VENDOR shall use commercially reasonable efforts to include in its SUB-VENDOR's provisions, which impose obligations on SUB-VENDORS, that are consistent with all of the obligations imposed on the VENDOR in the agreement between the County and the VENDOR in the event that a conflict exists between the terms of the agreement between the SUB-VENDOR and VENDOR and the terms of the VENDOR and/or County agreement, the terms of agreement between the VENDOR and County shall govern and control.

### C. Procedures

#### 1. Penalty for Non-Compliance

- a) Any VENDOR who is determined to be "non-compliant in-progress" by the County's Compliance Vendor shall be given notice of their non-compliance status. The VENDOR shall have thirty (30) days, from the date of notice, to become compliant with all applicable insurance provisions mentioned in this exhibit. In the event that the VENDOR does not become compliant within the permitted thirty (30) days, the relationship between the VENDOR and the County may be terminated.

#### 2. Appeal Process

- a. Should any VENDOR be determined to be "non-compliant" by the County's Compliance Vendor the VENDOR and/or department head may initiate an appeal of that determination on a form provided by a representative from the Auditor's office. The VENDOR's appeal will be brought before an Advisory Committee to the Board of Commissioners (hereinafter "the BOC") to determine whether an exemption should be

made on behalf of the **VENDOR**. The Advisory Committee shall provide a recommendation to the BOC and the BOC shall approve or deny the Advisory Committee's recommendation. The Advisory Committee shall consist of the County's insurance consultant, the Safety and Risk Manager for the County, the appropriate department head or representative from the appropriate department, a representative from the Auditor's office, and a representative of the County's legal counsel.

- b. Should a department head and/or an elected official identify a **VENDOR** to be an appropriate candidate to submit an appeal, prior to being determined to be "non-compliant finalized" by the County's Compliance Vendor, they may do so immediately upon identifying the particular **VENDOR**. This appeal will be brought before the Advisory Committee established above in section D(2)(a). The Advisory Committee will send their recommendation to the BOC and the BOC shall approve or deny the Advisory Committee's recommendation.
3. All contracts shall provide the Certificates of Insurance to the County's Compliance Vendor. The department head or elected official shall provide the Certificate of Insurance contact information form to the Hamilton County Auditor's Office at [insurance.coi@hamiltoncounty.in.gov](mailto:insurance.coi@hamiltoncounty.in.gov) upon approval of the contract/agreement between the **VENDOR** and the County. The Certificates shall also name the following boards and committees as additional insureds if the contract applies to the property or activities of the following:
  - a. The Hamilton County Sheriff;
  - b. The Hamilton County Parks and Recreation;
  - c. The Hamilton County Health Department;
  - d. The Hamilton County Airport Authority;
  - e. The Hamilton County Solid Waste Board;
  - f. The Hamilton County Public Building Corporation (if applicable);
  - g. The Hamilton County 4-H Department; and/or
  - h. Hamilton County Drainage Board.

#### **GP17            PROJECT RESPONSIBILITY**

Unless otherwise specified in the Contract Documents, the *CONTRACTOR* shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, and sanitary facilities and all other facilities and incidentals necessary for the furnishing, performance, start-up, and completion of the work.

#### **GP18            STANDARDS OF QUALITY**

All materials and equipment shall be of good quality and new, except as otherwise provided in the

Contract Documents. All warranties and guarantees specifically called for in the Contract Documents shall expressly run for the benefit of the *OWNER*. If requested by the *ENGINEER*, the *CONTRACTOR* shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

#### **GP19 SUPERVISION**

The *CONTRACTOR* shall supervise and direct the work completely and efficiently devoting such attention thereto and applying such skills and expertise as may be necessary to perform the work in accordance with the Contract Documents.

#### **GP20 RESIDENT SUPERINTENDENT**

The *CONTRACTOR* shall keep on the work site at all times during its progress, a competent resident superintendent, who shall not be replaced without written notice to the *ENGINEER* except under extraordinary circumstances. The superintendent will be the *CONTRACTOR*'s representative at the site and shall have authority to act on behalf of the *CONTRACTOR*. All communications given to the superintendent shall be as binding as if given to the *CONTRACTOR*.

#### **GP21 PROJECT STAFFING**

The *CONTRACTOR* shall provide competent, suitably qualified personnel to survey and lay out the work and perform construction as required by the Contract Documents. The *CONTRACTOR* shall at all times maintain good discipline and order at the site.

#### **GP22 INSPECTION OF WORK**

The *ENGINEER* and his representatives shall at all times have access to the work wherever it is in preparation or in progress.

If the specifications, the *ENGINEER*'s instructions, laws, ordinances or any public authority requires any work to be specially tested or approved, the *CONTRACTOR* shall give the *ENGINEER* timely notice of its readiness for inspection and, if the inspection is by an authority other than the *ENGINEER*, the date fixed for such inspection. If any work should be covered up without the approval or consent of the *ENGINEER*, it must, if required by the *ENGINEER*, be uncovered for examination at the *CONTRACTOR*'s expense.

#### **GP23 NOTIFICATION OF WORK SCHEDULE**

The *CONTRACTOR* shall provide a listing of the next workday's work activities by 12:00 p.m. of that day's work for the *ENGINEER*'s scheduling and inspection. All work scheduled for Monday shall be provided on Friday of the preceding week.

Failure to provide such notice within the specified time may result in the failure of the *ENGINEER* to pay for any material placed that day.

## **GP24                    PROGRESS SCHEDULE**

Within ten days after the date of the Notice to Proceed, the *CONTRACTOR* shall submit to the *ENGINEER* for review a proposed schedule indicating the starting and completion dates of the various stages of the work to be performed under this contract. The *ENGINEER* shall review the proposed schedule to determine conformity with the contract and will make recommendations to the *OWNER* concerning approval thereof; however the review, approval or other action taken by the *ENGINEER* or *OWNER* in respect of such schedules shall not relieve the *CONTRACTOR* of its obligations to perform the work within the contract schedule(s).

## **GP25                    DELAY AND EXTENSION OF TIME**

If the *CONTRACTOR* should be delayed at any time in the progress of the work by an act or neglect of the *OWNER* or the *ENGINEER*, or of any employee of either, or by any separate *CONTRACTOR* employed by the *OWNER*, or by changes ordered in the work, or by strikes, lockouts, fire, unusual delay in transportation, unavoidable casualties or any causes beyond the *CONTRACTOR*'s control, or by delay authorized by the *ENGINEER* pending arbitration, or by any cause which the *ENGINEER* shall decide to justify the delay, then the time of completion shall be extended for such reasonable time as the *ENGINEER* may decide.

No such extension shall be made for delay occurring more than seven days before claim therefore is made in writing to the *ENGINEER*. In the case of continuing cause of delay, only one claim is necessary.

## **GP26                    CHANGES IN THE WORK**

The *OWNER*, without invalidating the Contract, may order extra work or make changes by altering, adding to or deducting from the work, the Contract Sum being adjusted accordingly. All such work shall be executed under the conditions of the original contract except that any claim for extension of time caused thereby shall be adjusted at the time of ordering such change.

In giving instructions, the *ENGINEER* shall have authority to make minor changes in the work, not involving extra cost, and not inconsistent with the purposes of the work, but otherwise, except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order from the *OWNER* signed or countersigned by the *ENGINEER*, or a written order from the *ENGINEER* stating that the *OWNER* has authorized the extra work or change, and no claim for an addition to the contract sum shall be valid unless so ordered. The value of any such extra work or change shall be determined in one or more of the following ways:

- (a) By estimate and acceptance in a lump sum
- (b) By unit prices named in the contract or subsequently agreed upon
- (c) By cost and percentage or by cost and a fixed fee

If none of the above methods is agreed upon, the *CONTRACTOR* provided he receives an order as above, shall proceed with the work. In such case and also under case (c), he shall keep and present in such form as the *ENGINEER* may direct, a correct account of the cost, together with

vouchers. In any case, the *ENGINEER* shall certify to the amount including reasonable allowance for overhead and profit, due to the *CONTRACTOR*. Pending final determination of value, payments on account of changes shall be made on the *ENGINEER*'s certificate.

Should conditions encountered below the surface of the ground be at variance with the conditions indicated by the drawings and specifications, the contract sum shall be equitably adjusted upon claim by either party made within a reasonable time after the first observance of the conditions.

#### **GP27            DELETION OF WORK**

The *OWNER* has the right to delete any items that are a part of this contract.

#### **GP28            PARTIAL PAYMENTS**

Partial payments will be made once each month as the work progresses. Said payments will be based upon estimates prepared by the *CONTRACTOR* using the provided HCHD FORM 8049, and approved by the *ENGINEER* for the value of the work performed and materials complete in place in accordance with the contract, plans and specifications. No partial payment will be made when the amount due the *CONTRACTOR* since the last estimate amounts to less than Five Hundred Dollars. From the total of the amount determined to be payable on a partial payment, ten percent of such total amount will be deducted and retained by the *OWNER* until the final completion and acceptance of the work.

#### **GP29            FINAL PAYMENT**

When the contract work has been completed in an acceptable manner in accordance with the terms of the contract, the *CONTRACTOR* will prepare a final estimate for the work and will furnish the *ENGINEER* with a copy thereof. Before final payment of the contract, the *CONTRACTOR* shall furnish the provided Affidavit and Waiver of Lien from all subcontractors, material suppliers and equipment suppliers who provided goods and/or services valued at \$500.00 or greater. Final payment will not be made until a final inspection has been performed, the work has been accepted by the County and has met the requirements of Section 109.08 of the Indiana Department of Transportation Standard Specifications. The *ENGINEER*, acting for the Board of County Commissioners, will then certify to the County Auditor the balance due the *CONTRACTOR*, and said certificate will be deemed an acceptance of the completed contract by the *OWNER*.

#### **GP30            UTILITIES**

The *CONTRACTOR* shall be responsible for contacting and coordinating with all utilities affected by this project. Contract time will be charged unless the *CONTRACTOR* can show written evidence that he is making every possible effort on his part to get the utility work completed.

#### **GP31            PERMITS**

All permits and licenses which may be required due to construction methods such as, but not limited to, borrow or disposal pits, stream crossings, causeways, work bridges, cofferdams, etc.,

but which are not part of the contract documents shall be procured by the *CONTRACTOR* prior to beginning the work which requires the permit.

All charges, fees, and taxes shall be paid, and all notices necessary and incidental to the due and lawful prosecution of the work shall be given.

**GP32            HOLIDAYS THAT WORK IS NOT PERMITTED**

The *CONTRACTOR* may not perform work on this project on the following days without written permission from the *ENGINEER*:

- 1) Sundays
- 2) New Year's Day
- 3) Memorial Day
- 4) Independence Day
- 5) Labor Day
- 6) Thanksgiving Day and the day after Thanksgiving
- 7) Christmas Day

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## **SPECIAL PROVISIONS**

### **SP1 CONTRACT TIME**

The schedule for the completion of the work included in this contract including incidentals and clean up, shall be governed on a Calendar Day Basis.

The number of Work Days allowed for completion of this Contract shall be 180 Calendar Days after Notice to Proceed.

The earliest date to begin work shall be March 1, 2022. Earlier dates will be considered at CONTRACTOR'S request.

### **SP2 ROAD CLOSURE**

The CONTRACTOR shall limit the time that the road is closed to traffic to a maximum of 150 calendar days without written approval of an extension to this time from the OWNER.

The CONTRACTOR shall provide the OWNER at least three weeks notice prior to closing the road. In no case shall the road be closed without prior consent from the OWNER.

### **SP3 PRIOR TO CLOSING ROADS TO TRAFFIC**

The CONTRACTOR is to notify U.S. Post Office, rural fire departments, affected schools, local police agencies and Hamilton County Sheriff's Department, copy to ENGINEER. The XG20-5 Closure Signs are to be in place a minimum of two weeks prior to the actual closure.

### **SP4 AFTER OPENING ROADS TO TRAFFIC**

The CONTRACTOR is to notify the U.S. Post Office, rural fire departments, affected schools, local police agencies and Hamilton County Sheriff's Department, copy to ENGINEER.

### **SP 5 PRE-CONSTRUCTION CONFERENCE**

Before the CONTRACTOR is issued a Notice to Proceed, a conference attended by the OWNER, ENGINEER, CONTRACTOR and others as appropriate will be held. The purpose of this conference will be to discuss procedures for making submittals, processing applications for payment, and to establish other procedures and understandings bearing upon coordination and performance of the work.

- Contractor shall submit the following documents at the Pre-construction Conference:
- Payment Bond as mentioned elsewhere herein
- Performance Bond as mentioned elsewhere herein
- Certification Letter as mentioned elsewhere herein
- Certificate of Insurance as mentioned elsewhere herein
- Specific Mix Design, Certification, and specification of material required to be

submitted as mentioned elsewhere herein

CONTRACTOR shall not be allowed to proceed with any work until all the above-mentioned documents are submitted to the ENGINEER. Notice to proceed shall be issued as mentioned elsewhere herein and all work / calendars days shall be counted after issuance of Notice to Proceed. . This time frame also includes review and approval of any mix design and certification required as mention elsewhere herein. ENGINEER shall have minimum of 72-hours for review and approval of any mix design submitted.

#### **SP6 NOTICE TO PROCEED**

The CONTRACTOR shall start to perform the work on the date designated in the written Notice to Proceed, but no work shall be done at the site prior to the date of the Notice to Proceed.

#### **SP7 EXISTING CONDITIONS**

The CONTRACTOR shall verify the elevation and measurements of all points where new construction is to match existing conditions prior to the commencement of any construction activities.

Where new work is to be fitted to old work, the CONTRACTOR shall check all dimensions and condition in the field and report any errors or discrepancies to the ENGINEER or assume responsibility for their correctness and the fit of new parts to old. If such parts do not fit properly, CONTRACTOR shall make at CONTRACTOR'S expense such alternations to new parts as may be necessary to assure proper fits and connection, which meet the approval of the ENGINEER.

No direct payment shall be made for this work, but the cost thereof shall be included in the costs of other items of the contract.

#### **SP8 EXTRA WORK**

No claim for extra work will be considered unless such extra work has previously been ordered by the County or their authorized representative(s) in writing and the price therefore agreed upon before the extra work is started.

#### **SP9 OPEN BURNING OF NATURAL GROWTH**

Open burning of natural growth will not be permitted on this contract.

#### **SP10 TREE AND LAWN PROTECTION**

When constructing private drives, the *CONTRACTOR* shall use reasonable care for the protection of trees, shrubbery, and lawn areas beyond the permanent right-of-way.

The cost of the protection or trimming and proper restoration of disturbed areas shall not be paid for directly but shall be included in the cost of Clearing Right-of-Way.

## **SP11                    CLEARING RIGHT-OF-WAY**

This work shall consist of clearing County Right Of Way around Bridge # 72. It shall include but not limited to removal of any tree either underneath the bridge and/or 4 feet away from the edge of the bridge coping. Limits of the clearing is from right-of-way to right-of-way and in accordance with Section 201 and 621.

All labor, material, seeding, removal of trees, and equipment necessary to clear right of way and to dispose of the material in a suitable manner shall be included in the pay item for "Clearing Right of Way", LSUM.

## **SP12                    RESTORATION OF DISTURBED AREAS**

Cavities formed by the removal of shrubs, trees and/or stumps and located outside of proposed pavement areas shall be backfilled and compacted with "B" Borrow. Such compaction shall comply with Section 211.04. The top six (6) inches of the backfilled area shall be topsoil in accordance with Section 914.01. Any roots remaining after all the removal of any designated item shall be removed to a depth of 6 inches below the surface of the surrounding ground area. The final preparation of these areas shall be in accordance with Section 621.

No direct payment shall be made for this work but shall be included in the cost of other items.

## **SP13                    DISPOSAL OF EXCESS MATERIAL**

All excess material not to be salvaged (waste) shall be removed from the project site. Whether a private or public waste site is utilized, such disposal shall comply with all Federal, State and local ordinances and permit requirements.

No direct payment will be made for this work but the cost thereof shall be included in the costs of the other items of the contract.

## **SP 14                    ENVIRONMENTAL RESTRICTIONS**

The work shall be performed in accordance with the environmental restrictions shown below.

### **Tree Habitat:**

All trees outside the construction limits shall not be disturbed.

### **Indiana Bat:**

All felling of trees equal to or greater than 3 in. in diameter shall be performed between October 1 and the following March 31, inclusive, so as to minimize project related impacts on the Indiana bat, *Myotis Sodalis*.

### **Fish Spawning:**

If the contract contains an in-channel work restriction due to impacts upon fish spawning, the Contractor may request a waiver of a portion of the restriction period by means of written contact to the Indiana Department of Natural Resources Division of Fish and Wildlife, Environmental Supervisor. Such request shall be made not more than two weeks prior to anticipated in-channel work during the restriction period shown above. The expected response time from the Indiana Department of Natural Resources will be approximately five work days. The Indiana Department of Natural Resources will consider each waiver on a case-by-case basis.

The information and criteria shown below shall be provided with the waiver request.

1. Location of the project, including stream name, route number or road name, Indiana Department of Natural Resources Certificate of Approval of Construction in a Floodway docket number, and description of the proposed work.
2. Amount of time required to do the work, and the dates requested to be waived. The amount of time required shall be reasonable to accomplish the proposed work.
3. The amount of in-channel area proposed to be disturbed by the work. Disturbance across the full width of the stream may result in more negative impacts than disturbance of smaller portions of the stream.
4. Water level at the time of the request.
5. Approximate water temperature at the time of the request.

### **Migratory Bird Protection:**

The structure may, or may not, have shown evidence of use, such as nests, by a bird species protected under the MBTA during previous inspections. Every effort shall be made by the Contractor not to disturb any nests with eggs or young.

During the period between May 1 and September 7, bridge work on structures with migratory birds will be allowed provided the procedure below is implemented:

1. For bridge structures which may result in perforation of the deck or create strong vibrations that could potentially dislodge nests beneath the deck or that requires activity above and below the deck to include removal shall require that the Contractor use exclusionary devices to deter birds from nesting beneath the deck prior to start of work. If birds are present, the Contractor shall determine the status of the birds, their nests, and young and shall take any and all actions necessary to meet the requirements of the Migratory Bird Treaty Act.
2. For bridge work performed from September 8 to April 30, birds are normally not

nesting; therefore, no special actions by the Contractor are necessary after an inspection is conducted to determine that no birds are present.

### **Avoidance and Minimization Measures:**

Measures designed to avoid and minimize impacts to migratory birds nesting on structures shall be implemented prior to April 30 and be maintained throughout the nesting season. The Contractor shall be responsible for developing a project specific avoidance and minimization plan that shall be as approved by the Engineer. Avoidance and minimization measures shall include, but shall not be limited to:

After inspection and confirmation that no active nests with eggs or young are present, the Contractor shall remove existing nests and other nesting debris from the bridge girders or other surfaces that will be impacted by the project.

After nest removal, exclusion devices shall be installed on the structure, especially if the start of construction will be delayed after April 30. Exclusion devices may include plastic sheeting, canvas, burlap or other material to block access to the underside of bridges and exterior girders. Ledge protectors, such as coil, pin and wire, can be placed on structures to prevent nest building where appropriate. The use of weather resistant polypropylene netting with 1/4 in. or smaller openings is also an option but is not recommended since it can trap adult birds.

After nest removal, hazing or harassment devices using sight or sound to scare the birds away may be installed on the structure. Materials may include mylar flagging and auditory speakers. Other sensory deterrents such as active construction, predator models, scare balloons and sonic devices may also be used.

The Contractor shall inspect the underside of the existing structure, including piers, on a routine basis to ensure that nests are removed prior to egg laying and that exclusion devices that have been damaged are repaired. If eggs or young are present, construction activity that may impact those nests shall not occur and the Department's Office of Environmental Services shall be contacted. No additional contract times will be granted if eggs or young are found.

The Contractor shall consider not removing nests that are near, but not in, the immediate work area. The nests may also be screened from construction to prevent impacts. Work may continue if the active nests will not be destroyed and if parent birds will not be precluded from tending their nests to the extent that eggs or young are negatively impacted.

### **Status of Birds and Nests**

If nest building or repair of existing nests has begun, but no eggs or young are present in the nests based upon visual inspection of the nest and activity of the adults, the Contractor shall remove the nests.

Every effort shall be made by the Contractor not to disturb any nests with eggs or young. If active nests with eggs or young are found that would be affected by construction activities, work shall be delayed until an evaluation of nesting status and avoidance and minimization

measures implemented or the birds fledge from the nest.

All costs for determining the need for, the placing of deterrents, monitoring, removal of nests, and all costs associated with conducting work in compliance with the Migratory Bird Treaty Act as stated herein will not be paid for separately but shall be included in the cost of other items.

## **SP15            TESTING OF MATERIALS**

The CONTRACTOR shall be responsible for all testing and sampling of materials as hereinafter specified. The CONTRACTOR shall furnish certified tests for the following materials, which are to be made by an independent laboratory approved by the ENGINEER. The independent laboratory shall submit copies of all test results directly to the ENGINEER. Testing performed by an agent of a material producer or supplier will not be considered independent. The cost of providing samples and testing will not be paid for directly but will be included in the cost of other items.

### CONCRETE

Advance Concrete Tests: Concrete tests shall be conducted in accordance with A.S.T.M. Serial Des. C-39, for compliance with the requirements of these specifications.

Slump: For each 25 cubic yards or fraction thereof taken from forms.

Compression: The Contractor shall have tests made at a testing laboratory that is approved by the Engineer. The Contractor shall furnish to the Engineer all equipment and facilities necessary to prepare concrete test specimens. Three test cylinders 6" in diameter and 12" high will be made for each 100 cubic yard of each class of concrete or fraction thereof, placed each day. The Contractor shall properly crate and transport the cylinder test specimens to the approved laboratory.

The minimum compressive strength at 28 days shall be:

Class "A" Concrete, 3500 P.S.I.

Class "B" Concrete, 3000 P.S.I.

Class "C" Concrete, 4000 P.S.I.

One of the three test specimens shall be tested at 7 days and the remaining two specimens shall be tested at 28 days.

Concrete test specifications shall be in accordance with AASHTO Des. T-23; cylinder specimens shall be tested in accordance with ASSHTO T-22, and test beams shall be treated in accordance with AASHTO Des. T-97.

If the Contractor desires to remove forms sooner than as specified in Article 702.13, he shall make 6x6x36 test beams to provide information for stripping forms. Equipment for testing these beams shall be furnished by the Contractor.

**BITUMINOUS MATERIAL**

The Contractor shall provide proof that all bituminous material used shall be of State tested material and on immediate usage basis. Class D certification required.

**BORROW**

The CONTRACTOR shall determine the location of the borrow pit and shall have laboratory density tests made as prescribed in Section 203.24 and outlined in AASHTO T-99. The subgrade shall be constructed in accordance with Section 207. No direct payment will be made for subgrade treatment. The cost of all work and testing for subgrade treatment shall be included in other items of the contract. Frequency of the density testing shall be every 100 ft for each lane of pavement per lift. Density testing for shoulder width greater than 6 feet shall be every 300 feet per lift.

**FOUNDATION**

The CONTRACTOR shall verify soil bearing capacity meet or exceed the design capacity at each wingwall and main footing. Engineer shall determine the location of each test.

**REINFORCING STEEL**

The Contractor shall furnish the Engineer with two (2) copies of certified mill test reports. Reinforcing steel shall comply with the requirements set out in Article 910.01. Grade 60 steel shall be used.

**STRUCTURAL STEEL**

The Fabricator shall provide copies of mill orders, change orders, mill shipping statements, and mill test reports for all structural steel elements prior to the start of fabrication.

**SP16                    GEOTECHNICAL INVESTIGATION**

A Geotechnical investigation for this project site has been performed by Earth Exploration, LLC, Indianapolis, Indiana. This report presents the soil evaluation, Geotechnical recommendations and construction considerations for this project.

A copy of this report is included herein as Appendix B.

**SP17                    DECREASED OR INCREASED QUANTITIES OF WORK**

These Special Provisions shall not be considered as a waiver of, nor shall they invalidate the right of the *ENGINEER* to increase or decrease quantities of work.

**SP 18                    VARIATION IN QUANTITIES**

The estimated quantities shown on the Bid Sheet Form are the Engineer's estimates of the quantities required to complete the work shown on the Plans, required by the Specifications, or both. Said quantities are intended to be true and correct but are not guaranteed. If there is a difference between the quantities shown on the Bid Sheet Form and the quantities actually required to complete the work as shown on the Plans, required by the Specifications, or both,

the Plans and Specifications shall govern. If there are errors in the Plans or if the Plans are changed by the direction of the County, the Contract will be altered by change order to cover the necessary additions or deductions computed at the unit price originally submitted. Insertion of new items in the Bid Form by the bidder may result in the Bid being declared a Counter Bid and may result in its rejection

#### **SP19 COOPERATION WITH PUBLIC UTILITIES**

The Contractor shall notify any utility which might have facilities in the way of the construction four weeks prior to beginning work.

The Contractor's attention is directed to Section 107.20 regarding his responsibility for Utility Properties and Service. No work is to commence until all utility owners have been contacted and the exact location and depth of existing lines has been established and the necessary arrangements for the protection thereof have been made. All work to be performed adjacent to existing lines shall be done in the presence of utility personnel, unless permission is otherwise granted from the particular owner involved.

#### **SP20 UTILITY, RIGHT OF WAY, AND ENCROACHMENT INFORMATION**

Such existing conditions are as described below.

##### Utilities

The status of all utility companies and organizations potentially involved with the work to be performed are described below as know at the time this contract was prepared.

The facilities of Frontier Communication exist within the project limits but will be relocated prior to the start of construction. If questions arise, Steve Costlow of the utility may be contacted at 317-984-9010.

The facilities of Duke Energy exist within the project limits but are not expected to be affected by the proposed construction. If questions arise, Cindy Rowland of the utility may be contacted at 317-776-5341.

##### Right-of-Way

All additional right-of-way requirements for the contract have been cleared.

##### Encroachments

There is no involvement of encroachments for the contract.

##### Other Noteworthy Conditions

There are no other noteworthy conditions which may affect the prosecution and progress of the contract.



**SP21                    DETERMINATION AND EXTENSION OF CONTRACT TIME**

An extended date of completion will only be considered if the notice to proceed is not issued within 90 days of the letting except if the delay is due to the failure of the CONTRACTOR to furnish any stated or requested forms or information.

**SP22                    LIQUIDATED DAMAGES**

Damages setout below are not meant to penalize the contractor, but to insure timely completion of this contract. It is the sole responsibility of the CONTRACTOR to thoroughly familiarize himself with these contract documents.

The CONTRACTOR shall pay one thousand dollars (\$1,000.00) for each calendar day after the permitted contract time has expired as setout elsewhere herein for failure to complete the work in accordance with this contract.

The CONTRACTOR shall also pay one thousand dollars (\$1,000.00) for each calendar day after the permitted 150 calendar days that the road is closed to traffic.

The CONTRACTOR shall pay one thousand dollars (\$1,000.00) for each calendar /or portion thereof for failure to complete specific time sensitive operation, mentioned elsewhere herein, within the time frame allowed.

If the CONTRACTOR exceeds any or all allotted time periods simultaneously, the assessed damages will be cumulative.

**SP23                    PROTECTION OF FIELD TILE**

All field tiles encountered and affected by the scope of work specified within the contract documents shall be given a positive outlet. Animal guards are required on the ends of all field tiles. The cost of all animal guards shall be included in the cost of the pipe.

Any tile outside the construction limits damaged by the CONTRACTOR's operations shall be replaced by the CONTRACTOR at his own expense.

**SP24                    PRESENT STRUCTURE, REMOVE PORTION**

This work shall consist of removing the deck, beams, bearings, end bents, and portions of piers on Bridge #72 (266th Street Over Cicero Creek) as indicated in the detail drawing and in accordance in Section 202 of the Standard Specification.

All labor, material, surface milling of asphalt, equipment, supervision and other related work required to complete this work shall be included in the pay item identified as "Present Structure, Remove Portion", LSUM.

**SP25                    PAVEMENT, REMOVE**

This work shall consist of removal of existing reinforced concrete bridge approaches in accordance with Section 202.00.

Removed RCBA materials shall become property of the contractor and be properly disposed of as a part of this pay item. Any damages to curbs or utilities will be the responsibility of the contractor and he shall repair or cause these items to be repaired at his own cost as directed by the engineer.

All labor, material, equipment, supervision, disposal of milled material, and other related work required to complete this work shall be included in the pay item identified as "Pavement, Remove", SYS.

**SP26                    EXCAVATION, DRIVEWAY**

Excavation and/or borrow required for driveway construction shall be included in the cost of other items.

**SP27                    EMBANKMENT OVER EXISTING ROADBEDS**

Placement of new embankment over the existing roadbed shall not be permitted. The existing pavement shall be removed entirely, or milled full-depth, spread and re-compacted prior to any fill being placed in the roadbed. The cost of removal of the existing pavement is included in the pay item "Excavation, Common".

**SP28                    SEEDING AND SODDING**

If the seeding is placed outside the seasonal limitation requirement per INDOT Specification, then warranty Bond shall include all operations necessary for re-installation, including re-installation of erosion control blankets as specified on the plans.

**SP29                    SEEDING OUTSIDE CONSTRUCTION LIMITS**

Areas which have been disturbed by construction and are outside the construction limits shall be seeded with seed mixture grass type 2 in accordance with 621.06(g) 2, or seed mixture legume type 2 in accordance with 621.06(h) 2, as directed.

No payment will be made for seeding required in areas outside the construction limits, which have been disturbed by construction.

**SP30                    SODDING, NURSERY**

This work shall consist of furnishing and placement of sod at the location mentioned elsewhere herein in accordance with Section 105.03 and 621.

All labor, material, equipment, watering of sod, maintenance of sod until final acceptance of the contract, supervision and other related work required to complete this work shall be included in the pay item identified as "Sodding, Nursery", SYS.

### **SP31                    MILLING TRANSITION, ASPHALT**

This work shall consist of removal of existing bituminous asphalt pavement from both East and West of Bridge #72 approach (266<sup>th</sup> Street Over Cicero Creek), to the limits shown on the detail drawing and accordance with Section 306.00.

Milled material shall become property of the contractor and be properly disposed of as a part of this pay item. At the discretion of the ENGINEER, CONTRACTOR shall be allowed to use milling material to extend the shoulder beyond the project limit. Any damages to curbs or utilities will be the responsibility of the contractor and shall repair or cause these items to be repaired at his own cost as directed by the engineer.

All labor, material, equipment, supervision and other related work required to complete this work shall be included in the pay item identified as "Milling, Transition", SYS.

### **SP32                    PREPARATION OF EXISTING ROADWAYS**

The CONTRACTOR shall clip the edges of the existing pavement prior to resurface as directed by the ENGINEER. After clipping, all debris shall be disposed of off site. If vegetation exists in cracks within the area to be paved, spraying of weed killer is required prior to resurface. Power sweep the road section immediately prior to resurface. Any debris, which does not come off the pavement by sweeping, shall be hand cleaned. All roads shall be strung. The cost of this work shall be included in the other items in the contract.

### **SP33                    HMA SURFACE, TYPE C**

This work shall consist of constructing a Surface course of hot mix asphalt in a central plant and spread and compacted on a prepared surface. The mixture shall be specified as HMA Type C, Surface in accordance with INDOT Section 402.04 except as follows:

RECYCLED MATERIAL: As per the 2010 INDOT specifications, the contractor may not use any recycled materials in the surface mixture.

Acceptance shall be based on Section 402.09 and CONTRACTOR shall furnish Class "D" certification.

TEMPERATURE REQUIREMENTS: Per INDOT Standard Specifications.

### **SP34                    WIDENING WITH HMA, TYPE C**

This work shall consist of constructing an HMA base on a prepared surface in accordance

with Section 105.03 and constructing the outside face of the excavation in accordance with Section 304.05 of the INDOT Standard Specifications

Widening mixtures shall be HMA, Type C mixtures in accordance with Section 402 and as shown on the typical section.

Acceptance shall be based on Section 402.09 and CONTRACTOR shall furnish Class "D" certification.

#### **SP35                    GUARDRAIL END TREATMENT, OS**

This work shall consist of installation of "Guardrail End Treatment, OS" as indicated in the detail drawing and in accordance with these specification and Section 601.00 of the Standard Specification.

Guardrail end treatments shall be required to terminate guardrail installation at the locations shown on the bridge plans. Each unit shall be installed in accordance with the manufacturer's recommendation.

All labor, material, equipment, supervision and other related work required to complete this work shall be included in the pay item identified as "Guardrail End Treatment, OS", Each.

#### **SP36                    DETOUR ROUTE MARKER ASSEMBLY**

This work shall consist of installation of Detour Route Marker Assembly, as indicated in the detail drawing, and in accordance with Section 801.05 of the Standard Specification.

CONTRACTOR shall be required to post detour sign (XM4-8), arrow marker (M6-1S), and other necessary marker required or directed by the ENGINEER. All labor, material, equipment, maintenance, and supervision required to complete this work shall be included in the pay item identified as "Detour Route Marker Assembly", EACH.

#### **SP37                    ROAD CLOSURE SIGN ASSEMBLY**

This work shall consist of installation of Road Closure Sign Assembly shall be used with Type B Barricades and Type A Warning Lights, as indicated in the detail drawing and in accordance with Section 801.06, 801.07, and 801.14 of the Standard Specification.

All labor, material, equipment, maintenance, and supervision required to complete this work shall be included in the pay item identified as "Road Closure Sign Assembly", EACH.

#### **SP38                    SURFACE SEALING**

Surfaced to be sealed shall include the concrete portion of the bridge barrier railing which is to be thoroughly cleaned of all foreign materials by sandblasting or other INDOT approved method just prior to sealing. Surface Seal shall not take place until the OWNER or the

ENGINEER have inspected the area and have approved of it. Concrete Sealer shall not be applied in any of the following weather conditions:

Rain. If rain is anticipated within 48 hour after application

Temperature: If temperature is below the manufacturer recommendation.

All labor, material, equipment, and supervision required to complete this work shall be included in the pay item identified as "Surface Seal", LSUM.

#### **SP41            SURVEYOR MARKER**

Before the marker is disturbed, the Hamilton County Surveyor's Office shall be notified seven (7) calendar days in advance in writing. Any marker disturbed or covered without the notification of the Hamilton County Surveyor's Office or without the Engineer's approval shall be repaired/reset at the contractor's expense.

#### **SP42            BENCHMARK**

The CONTRACTOR shall install a USGS benchmark at Bridge #72. This work is to be done in accordance with Section 105.08 and Section 615 of the Standard Specifications. The CONTRACTOR shall coordinate with the Hamilton County Surveyor's Office (HCSO) for the location of the benchmark.

The HCSO will provide the CONTRACTOR with the new monument to be installed. In addition, the CONTRACTOR shall notify the HCSO 30 days prior to construction so that the necessary steps to offset an elevation may be taken. The CONTRACTOR shall submit to the HCSO (copy to ENGINEER) a letter from a Licensed Surveyor certifying this elevation.

The cost of all labor, materials and equipment necessary to complete this work shall be included in the cost of other items.

#### **SP43            IDEM NOTIFICATION FOR STRUCTURE REMOVAL**

A bridge asbestos survey was performed by DLZ, Indiana, LLC. The Bridge Asbestos Survey Summary and IDEM Notification of Demolition are included in the contract documents, as Appendix C, for use by the CONTRACTOR. The CONTRACTOR shall complete the Notification of Demolition form and submit it to the Indiana Department of Environmental Management.

#### **SP44            PERMITS**

Copies of all permits obtained by the OWNER are included in contract documents, as Appendix E. According to the requirements of the governing agencies, the authorizations must be conspicuously displayed at the project site and the CONTRACTOR shall perform his work in accordance with the conditions contained in all permits.

**SP45                      CROSSING PERMIT**

The Hamilton County Surveyor's Office has granted a Crossing Permit for this work. A copy of this permit is provided herewith. The CONTRACTOR shall notify the Hamilton County Surveyor's Office 48 hours prior to open drain construction at (317) 776-8495.

**SP46                      AS BUILT DRAWINGS**

The CONTRACTOR, at no extra cost, shall furnish to the OWNER two complete sets of as-built drawings with all deviations, changes, errors and omissions plainly marked, verified in writing that their drawings are true and accurate.

The cost of this work will not be paid for directly, but the cost shall be included in the cost of other items.

**SP47                      TEMPORARY EROSION CONTROL MEASURES**

An amended Erosion Control Plan shall be submitted in accordance with 327 IAC 15-5 for those areas not included in the Department submittal as necessary for changes initiated by the Contractor. Items to include consist of sequencing of operations, stockpile sites, equipment storage sites, plant sites, and haul roads as well as any revision to the Department's submittal. All appropriate erosion control items shall be in place prior to disturbing the project site. A copy of the amended plan shall be provided to the Engineer.

*Borrow and disposal sites shall be in accordance with 203.08.*

*The Contractor shall submit the planned sequencing of erosion and sediment control measures to be used on the project to:*

Hamilton County Soil & Water Conservation District  
1717 Pleasant Street  
Noblesville, IN 46060

*When required by 327 IAC 15-5, stockpile and storage sites shall be permitted by an IDEM Notice of Intent (NOI). The Contractor shall submit either a new IDEM NOI or revise the original NOI for the project. A copy of the new or revised NOI shall be submitted to the Engineer prior to any operations at a stockpile or storage site.*

*All information shall be submitted and approved prior to land disturbing activities. All appropriate erosion control items shall be in place prior to disturbing the project site. A copy of the amended plan shall be provided to the Engineer.*

The Contractor shall designate one or more of its employees as an Erosion Control Supervisor. The Erosion Control Supervisor shall be responsible for the preparation, submittal, and ensuring receipt of the approval of the amended erosion control plan. Such individual(s) shall also be responsible for obtaining all other necessary permits including the wetland inspection and archaeological record check and field survey in accordance with 203.08, and for all

environmental inspections. Such individual(s) shall oversee the installation of all erosion control measures and shall conduct weekly and post-event inspections and perform all other tasks related to the installation, maintenance, and removal of erosion control measures. The Erosion Control Supervisor shall accompany personnel from IDEM or other governmental agencies, as required, during site visits by those agencies. The Erosion Control Supervisor shall be responsible for completion of all reports in accordance with 205.

A minimum of 14 days prior to commencing work, the Contractor shall prepare and submit to the Engineer, for approval, an erosion control plan that includes, at a minimum, the following items:

- (a) Locations of all proposed soil stockpiles.
- (b) Locations of all proposed equipment storage areas, fueling locations, construction trailers, batch plants, and designated concrete truck washout areas.
- (c) Proposed construction sequence and phasing of erosion control measures.
- (d) Location of all construction entrances where vehicles and equipment will enter and exit the site.
- (e) Material handling and spill prevention plan, which shall include a list of expected materials that may be present on the site during construction operations, as well as a written description of how these materials will be handled to minimize the potential that the materials may enter the storm water runoff from the site.
- (f) Statements that the erosion control measures for the project shall, at a minimum, be inspected on a weekly basis and within 24 hours of every ½ in. (13 mm) rain event.
- (g) Monitoring and maintenance plan for erosion control measures.

The erosion control plan shall be signed by the Erosion Control Supervisor. The Engineer will submit the erosion control plan to the Department's Office of Environmental Services Permit Coordinator.

The name of the Erosion Control Supervisor shall be furnished to the Engineer at, or prior to, the preconstruction meeting. Should the designated individual(s) need to be replaced during the contract, replacements shall be designated within seven calendar days and notification shall be furnished to the Engineer.

Permanent erosion control measures shall be incorporated into the work at the earliest practicable time as the construction progresses to stabilize the site.

*In order to minimize pollution to bodies of water, the practices and controls set out below shall be followed.*

- (a) When work areas are located in or adjacent to bodies of water, such areas shall be separated by a dike or other barrier to keep contained. Sediment disturbance of these bodies of waters shall be minimized during the construction and removal of such barriers.
- (b) All waterways shall be cleared as soon as practicable, of false-work, temporary piling, debris, or other obstructions placed during construction operations.
- (c) Water from aggregate washing or other operations containing sediment shall be treated by filtration, a settling basin, or other means sufficient to reduce the sediment content.
- (d) Pollutants such as fuels, lubricants, asphalt, sewage, wash water, or waste from concrete mixing operations, and other harmful materials shall not be discharged into

existing bodies of water.

(e) All applicable regulations and statutes relating to the prevention and abatement of pollution shall be complied with in the performance of the contract.

The cost of preparation of the erosion control plan shall be included in the cost of the various erosion and sediment control items.

Temporary erosion control measures shall be placed as soon as possible. Filter sock shall be installed prior to beginning earth disturbing activities.

Temporary seeding shall be placed on disturbed areas that are expected to be undisturbed for over 7 days or as directed by the Engineer.

Check dams shall be installed as soon as possible in areas of construction. Once ditches are to grade, permanent erosion control measures shall be placed as soon as possible and no later than 5 workdays after ditch grading is completed. During construction, if ditch flow patterns change, erosion control measures may need to be moved or adjusted so that no areas are left unprotected. Pipe end sections shall be placed when the structure is installed. If the pipe end sections cannot be placed at the same time, temporary riprap splashpads shall be placed at the outlets of the pipes until the pipe end sections or anchors can be placed.

### **Stable Construction Entrance**

The Contractor shall provide a stable construction entrance at the points where construction traffic will enter onto an existing road. This entrance shall be a minimum of 12 ft. wide, 50 ft. long, and constructed of 12 in. of No. 2 stone. The radii shall be large enough to accommodate the vehicles utilizing the entrance. Additional stone may be required, as directed, to maintain the usefulness of the stable construction entrance. Where there is insufficient room for a stable construction entrance, other measures shall be taken to prevent the tracking of sediment onto the pavement.

### **Maintenance**

Temporary erosion and sediment control measures shall be inspected by the Contractor's Erosion Control Supervisor once every seven days and after each rain activity. Inspections shall be documented, and records shall be maintained by the Contractor, to be made available for review upon request. Records shall include, at a minimum, the date, the inspector's name, the maintenance and corrections needed based on this inspection, and the status of previously identified deficiencies. The temporary protection measures shall be returned to good working conditions within 48 hours after inspection or as directed. Sediment shall be removed as approved and disposed of in accordance with 201.03 and 203.08. Inspection records shall be kept until the entire contract is complete and has been permanently stabilized.

No. 2 stone for stable construction entrances will be measured by the ton (megagram) in accordance with 109.01(b).



The cost of constructing, maintaining, and removal of all temporary erosion control measures shall be included in the cost of the pay item “Stormwater Management Budget.”

# **APPENDIX A**

## List of Standard Drawings

SEC.	CODE	SHEET	DRAWING SUBJECT	DRAWING CONTENTS	ACTIVE OR RETIRED	PUB DATE (EFF)	LAST STAMPED DATE	ACTION	PREVIOUS ACTION
205	TECD	01	Temporary Erosion Control	Temporary Erosion Control Index Sheet	ACTIVE	9/1/2019	9/1/2019		Revised-09/01/2019
205	TECD	06	Temporary Erosion Control	Temporary Check Dam, Revetment Riprap	ACTIVE	9/1/2019	9/1/2019		New-09/01/2019
205	TECD	11	Temporary Erosion Control	Perimeter Protection, Silt Fence	ACTIVE	9/1/2019	9/1/2019		New-09/01/2019
211	BFIL	04	Bridge Fill	Backfill Placement at End Bent, Beam Structure	ACTIVE	9/4/2012	9/4/2012		
306	TMPT	01	HMA Pvm. Wedging/Transition Milling	HMA Pavement Wedging and Transition Milling	ACTIVE	9/1/2020	9/1/2020		Revised-09-01-2020
503	BATJ	01	Terminal Joint	Terminal Joint Index and General Notes	ACTIVE	9/1/2021	9/1/2021	REVISED	Revised-09-01-2020
503	BATJ	03	Terminal Joint	Terminal Joint, Type HMA	ACTIVE	9/1/2020	9/1/2020		New-09-01-2020
601	GRET	06	Guardrail End Treatment	Grading at Guardrail End Treatments	ACTIVE	3/1/2004	3/1/2004		
601	GRET	08	Guardrail End Treatment	Grading at Guardrail End Treatments	ACTIVE	9/3/2002	9/3/2002		
601	MGSA	01	Midwest Guardrail Sytem Assembly	Midwest Guardrail System Assembly Index and General Notes	ACTIVE	9/1/2018	9/1/2018		New-09/01/2018
601	MGSA	02	Midwest Guardrail Sytem Assembly	Midwest Guardrail Sytem Assembly	ACTIVE	9/1/2018	9/1/2018		New-09/01/2018
601	MGSA	04	Midwest Guardrail Sytem Assembly	Midwest Guardrail Sytem Assembly	ACTIVE	9/1/2018	9/1/2018		New-09/01/2018
601	MGSA	05	Midwest Guardrail Sytem Assembly	Midwest Guardrail Sytem Assembly	ACTIVE	9/1/2019	9/1/2018		E.-09/01/2019<>N.-09/01/2018
601	MGSA	12	Midwest Guardrail Sytem Assembly	Midwest Guardrail Sytem Assembly, Guadrail Transition w/o Curb	ACTIVE	9/1/2019	9/1/2018		E.-09/01/2019<>N.-09/01/2018
601	MGSA	13	Midwest Guardrail Sytem Assembly	Midwest Guardrail Sytem Assembly, Guardrail Transition	ACTIVE	9/1/2019	9/1/2018		E.-09/01/2019<>N.-09/01/2018
601	MGSA	14	Midwest Guardrail Sytem Assembly	Midwest Guardrail Sytem Assembly, Guardrail Transition	ACTIVE	9/1/2019	9/1/2018		E.-09/01/2019<>N.-09/01/2018
601	MGSA	15	Midwest Guardrail Sytem Assembly	Midwest Guardrail Sytem Assembly, Guardrail Transition	ACTIVE	9/1/2019	9/1/2018		E.-09/01/2019<>N.-09/01/2018
601	MGSA	23	Midwest Guardrail Sytem Assembly	Midwest Guardrail System Assembly, Working Width	ACTIVE	9/1/2018	9/1/2018		New-09/01/2018
609	BRJT	01	Bridge Joint	Type 1A Joint	ACTIVE	9/1/2020	9/1/2005		Editorial-09-01-2020
610	DRIV	01	Drives	Index General Notes and Legend	ACTIVE	9/1/2019	9/1/2019		Revised-09/01/2019
610	DRIV	06	Drives	Class V Drive (Field Entrance)	ACTIVE	9/1/2019	9/1/2019		Revised-09/01/2019
615	RWPB	01	Right-of-Way Parking Barrier	Right-of-Way Marker/Concrete Parking Barrier	ACTIVE	3/1/2004	3/1/2004		
615	SLMN	01	Survey Line Monument	Survey Line Monuments	ACTIVE	9/1/1997	9/1/1997		
701	BPIL	02	Bridge Pilings	Field Splicing Pipe Piles	ACTIVE	9/4/2012	9/4/2012		
702	CJTA	01	Construction Joint	Type A Construction Joint	ACTIVE	9/4/2012	9/4/2012		
703	BRST	01	Bridge Reinforcing Steel	Bar Bending Details	ACTIVE	9/1/2015	9/1/2015		
706	BRPP	01	Railing, PF-1 and PS-1	Railing, PF-1 and PS-1 Index and General Notes	ACTIVE	9/1/2019	9/1/2019		Revised-09/01/2019
706	BRPP	02	Railing, PF-1 and PS-1	Railing, PF-1 Elevation, Section, and Rail End Detail	ACTIVE	9/1/2019	9/1/2019		Revised-09/01/2019
706	BRPP	04	Railing, PF-1 and PS-1	Railing, PF-1 and PS-1 Steel Tube and Rail Splice Details	ACTIVE	9/1/2019	9/1/2019		Revised-09/01/2019
706	BRPP	05	Railing, PF-1 and PS-1	Railing, PF-1 and PS-1 Base Plate and Reinforcing Bar Bending Details	ACTIVE	9/1/2019	9/1/2019		Revised-09/01/2019
706	TTPP	02	Concrete Bridge Railing Transition	Concrete Bridge Railing Transition, TPF-1 Plan and Elevation	ACTIVE	9/1/2019	9/1/2019		Revised-09/01/2019
706	TTPP	03	Concrete Bridge Railing Transition	Concrete Bridge Railing Transition, TPF-1 Sections and Reinforcing Bar Bending Details	ACTIVE	9/1/2019	9/1/2019		Revised-09/01/2019
715	BKFL	06	Pipe Backfill	Method 2, New or Existing Drive, Trench	ACTIVE	9/2/2008	9/2/2008		
715	MPES	01	Metal Pipe End Section	Metal Pipe End Section	ACTIVE	1/2/1998	1/2/1998		
715	MPES	03	Metal Pipe End Section	Metal Pipe End Section Connections	ACTIVE	1/2/1998	1/2/1998		
715	PHCL	01	Pipe Height of Cover Limits	Drawing Index and General Notes	ACTIVE	9/1/2017	9/1/2017		
715	PHCL	20	Pipe Height of Cover Limits	Cover Limits--Misc. Polyethylene Pipe	ACTIVE	9/1/2017	9/1/2017		
715	PHCL	24	Pipe Height of Cover Limits	Cover Limits--Reinforced Concrete Pipe	ACTIVE	9/1/2017	9/1/2017		
801	TCDT	01	Traffic Control Detour	Rural Detour	ACTIVE	9/1/2017	9/1/2017		
801	TCDV	01	Traffic Control Devices	Index Sheet Traffic Control Devices	ACTIVE	9/1/2016	9/1/2016		
801	TCDV	04	Traffic Control Devices	Type III Barricade	ACTIVE	9/1/2016	9/1/2016		
801	TCDV	05	Traffic Control Devices	Typical Construction Sign Mounting	ACTIVE	9/1/2016	9/1/2016		
801	TCDV	06	Traffic Control Devices	Type III Barricade Application for Road Closure for Thru Traffic	ACTIVE	9/1/2016	9/1/2016		
801	TCDV	07	Traffic Control Devices	Type III Barricade Application for Road Closure to All Traffic	ACTIVE	9/1/2016	9/1/2016		
801	TCSN	01	Traffic Control Signs	Traffic Control Signs Index Sheet	ACTIVE	9/1/2016	9/1/2016		
801	TCSN	02	Traffic Control Signs	Traffic Control Signs	ACTIVE	9/1/2016	9/1/2016		
801	TCSN	03	Traffic Control Signs	Traffic Control Signs	ACTIVE	9/1/2016	9/1/2016		
801	TCSN	04	Traffic Control Signs	Traffic Control Sign Design Details	ACTIVE	9/1/2018	9/1/2018		Editorial-09/01/2018
801	TCSN	05	Traffic Control Signs	Traffic Control Sign Design Details	ACTIVE	9/1/2016	9/1/2016		
801	TCSN	06	Traffic Control Signs	Traffic Control Sign Design Details	ACTIVE	9/1/2016	9/1/2016		
801	TCSN	07	Traffic Control Signs	Temporary Panel Sign Breakaway Post Installation	ACTIVE	9/1/2016	9/1/2016		
801	TCSN	08	Traffic Control Signs	Wood Post Design for Temporary Panel Signs	ACTIVE	9/1/2016	9/1/2016		

**APPENDIX B**  
Geotechnical Report

**GEOTECHNICAL EVALUATION**

**266<sup>TH</sup> STREET OVER CICERO CREEK  
STRUCTURE NO. HAMILTON 72  
HAMILTON COUNTY, INDIANA**

**Prepared for**

**DLZ INDIANA, LLC  
157 EAST MARYLAND STREET  
INDIANAPOLIS, INDIANA 46204**

**By**

**EARTH EXPLORATION, A TERRACON COMPANY  
7770 WEST NEW YORK STREET  
INDIANAPOLIS, INDIANA 46214-2988**

**SEPTEMBER 22, 2020**

September 22, 2020

Mr. David Henkle, P.E.  
DLZ Indiana, LLC  
157 East Maryland Street  
Indianapolis, IN 46204



Re: Geotechnical Evaluation  
266<sup>th</sup> Street over Cicero Creek  
Structure No. Hamilton 72  
Hamilton County, Indiana  
EEI Project No. CJ185650

Dear David:

We have completed our geotechnical evaluation for the referenced project. This report presents the results of our subsurface exploratory program and provides geotechnical recommendations for the proposed bridge rehabilitation and related roadway improvements. The work for this project was authorized by DLZ Indiana, LLC (DLZ) via a Work Order executed on June 29, 2020.

The opinions and recommendations herein are based, in part, on our interpretation of the subsurface information at the exploratory locations as indicated on the attached plan (Drawing No. CJ185650.B1). This report does not reflect variations in subsurface conditions between or beyond these locations. Variations in these conditions should be expected, and fluctuation of the groundwater levels will occur with time. Other important limitations of a geotechnical report are discussed in Appendix A.

## PROJECT DESCRIPTION

We understand that the commissioners of Hamilton County are planning to rehabilitate an existing bridge carrying 266<sup>th</sup> Street over Cicero Creek (i.e., Structure No. Hamilton 72) using local funds only. From a geotechnical perspective, the primary improvements to the bridge will include construction of new semi-integral end bents. The existing end bents are supported by some vertical steel-encased concrete (SEC) piles and some battered SEC piles. The existing vertical piles are planned to be re-used, and the battered piles are planned to be cut off 2 ft below the bottom of the new pile cap. The condition of the existing piles is not known. New piles are planned to be driven presumably in line with the cut-off battered piles. No foundation work is planned at the interior piers.

Road widening and shoulder reconstruction are also planned as part of these improvements. The existing travel lanes are planned to be resurfaced. To accommodate the wider travel lanes and shoulders, embankment widening is planned on both sides of the road. The projected 2039 ADT is 2,785 VPD, about 10 percent of which is anticipated to consist of trucks. Embankment slopes are planned to be established at 3H:1V, which will result in fill heights for the widening of up to about 7 ft. In addition, earth cuts of up to about 4 ft are planned to reestablish the roadside ditches on the east side of the bridge. The pavement improvements are planned to begin and end at Station 24+27 and 31+10 (Line "A"), respectively, for a total project length of 683 ft.

At this time, other information such as construction schedule is not known. In the event that the nature, design or location of the proposed construction changes, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and the conclusions are modified or confirmed in writing.

## **FIELD EXPLORATION AND LABORATORY TESTING**

Subsurface conditions for the proposed improvements were explored by performing two structure borings (designated TB-1 and TB-2) to a depth of about 70 ft below the existing ground surface and two road borings (designated RB-1 and RB-2) to a depth of 10 ft below the existing ground surface. In addition, several hand auger borings were performed along the toe of the existing embankment for embankment widening considerations. The number, location and depths of the exploratory elements were selected by Earth Exploration, A Terracon Company (EEI) and provided to DLZ for review. The borings were located in the field by EEI personnel referencing existing site features, and ground surface elevations at the test boring locations were interpolated to the nearest 1 foot based on topographic information provided on the preliminary plans. The exploratory locations and elevations should be considered accurate only to the degree implied by the methods used.

The test borings were performed using hollow stem augers to advance the boreholes. Representative samples of the soil conditions using Standard Penetration Test (SPT) procedures (AASHTO T 206) were obtained at predetermined intervals. Boreholes were backfilled with auger cuttings and a bentonite chip plug, and a pavement patch was placed at the road surface where appropriate. Additional details of the drilling and sampling procedures are provided in Appendix B.

Following the field activities, the soil samples were visually classified by an EEI engineering technician and reviewed by an EEI geotechnical engineer. After visual classification of the soil, representative samples were selected and submitted for index and strength property testing. These tests included: natural moisture content; Atterberg limits; unit dry density; unconfined compressive tests; and several hand penetrometer readings. The results of these tests are provided on the boring logs and/or respective laboratory reports in the Appendix. For your information, soil descriptions on the boring logs are in general accordance with the AASHTO system and the INDOT Standard Specifications (ISS<sup>1</sup>) (textural classification, e.g., clay loam). The boring logs represent our interpretation of the individual samples and field logs and results of the laboratory tests. The stratification lines on the boring logs represent the approximate boundary between soil types; although, the transition may be gradual.

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<sup>1</sup>References the Indiana Department of Transportation (INDOT) Standard Specifications.

## **SITE CONDITIONS**

### **Surface Conditions**

The project is located in a rural area with adjacent properties consisting of agricultural fields and single-home residences. Several trees are present within the project limits, particularly to the west of the creek. The road appears to have been constructed via primarily embankment fill to the west of the creek and modest amounts of cut and fill to the east of the creek.

The pavement at the exploratory locations consisted of about 6 to 12 in. of asphaltic concrete underlain by up to about 6 in. of crushed stone. At Boring TB-1, about 7 in. of asphaltic concrete was underlain by about 6 in. of Portland cement concrete which is likely the existing approach slab. At the hand auger locations near the toe of the slope, the surficial conditions consisted of about 2 to 4 in. of topsoil. Below the topsoil, the hand auger borings encountered cohesive soil. The cohesive soil was described as soft to a depth of ½ to 2 ft.

### **Subsurface Conditions**

Subsurface conditions at the test boring locations consisted primarily of cohesive soil (including the existing embankment fill) with a layer of wet granular soil beginning near El. 815 to 820 and extending to El. 795 to 800. Note that the flowline of the creek is near El. 815. Granular soil was also occasionally encountered within the embankment fill and particularly at Boring TB-1. This may be representative of backfill of the existing end bent.

Most of the cohesive soil was described as stiff to hard based on hand penetrometer readings typically 4 tons/sq ft (tsf) or greater. The main exception to this profile was to the west of the creek (i.e., Borings RB-1 and TB-1) and above the wet granular soil. In these areas, the cohesive soil was typically described as medium stiff to stiff based on hand penetrometer readings in the range of ½ to 2 tsf. Moisture contents in this range typically ranged from 11 to 24 percent as compared to a common range of 8 to 18 percent in the stiff to hard soils. Unconfined compressive strength tests performed on the deeper cohesive soil indicated peak undrained shear strengths in the range of 1.6 to 7.6 kips/sq ft (ksf).

The relative density of the granular soil was typically described as loose to dense based on SPT N-values in the range of 10 to 41 blows/ft (bpf).

### **Groundwater Conditions**

Groundwater level observations were made during and upon completion of the field activities and are noted on the boring logs. Groundwater was not observed at the location of Borings RB-1 and RB-2. At Borings TB-1 and TB-2, groundwater was observed during drilling near El. 814 to 817. Because the flowline is near El. 815, we anticipate that these levels are influenced by the level of water in the creek. As additional input, review of the *Soil Survey of Hamilton County* indicated that seasonal groundwater within 1 to 3 ft of the ground surface is common within the project area, particularly to the west of the creek. It should be noted that groundwater levels of any type will vary due to changes in precipitation, infiltration, run-off, level of water in the creek, and other hydrogeological factors.



## **DISCUSSION AND RECOMMENDATIONS**

Based upon the test boring information and the proposed construction, the conditions are conducive for support of the proposed bridge and road improvements as planned. We concur with the use of additional driven steel-encased concrete (SEC) piles for support of the end bents. Refer to the following paragraphs for design and construction considerations for the proposed bridge improvements and recommendations regarding subgrade preparation for support of new embankment and pavement.

### **Earthwork**

#### Site and Subgrade Preparation

We recommend that wet or soft near-surface soils and soils containing organic matter (if any) be removed and utilities in conflict with the proposed construction be appropriately abandoned or relocated. We recommend that these removal activities be in accordance with Section 201 of the ISS. Care should be taken during these removal activities to avoid undermining the existing pavement that is planned to be left in place. Where trees and/or root masses are removed, we recommend the area be regraded immediately to reduce the risk of soft areas developing due to loosely placed fill or ponding water. Where utilities (if any) are relocated, or abandoned, we recommend that the resulting excavations be backfilled with "B" Borrow and compacted to 100 percent of the standard Proctor density (AASHTO T 99).

After the surficial soil has been removed, we anticipate the subsurface conditions to generally consist of medium stiff to better cohesive soils with occasional granular soil near the shoulders. Where cohesive soil is exposed in fill and/or new pavement areas, we recommend that it be proofrolled in accordance with the ISS 203.26, if practical. In areas where proofrolling is not possible (i.e., narrow widths of new pavement or areas of narrow embankment widening), we recommend the subgrade be evaluated via other means (i.e., dynamic cone penetrometer). The purpose of proofrolling is to provide a first-order evaluation of how the subgrade is anticipated to react to construction traffic and gain an additional understanding of the conditions for support of the planned improvements. In order to reduce yielding conditions and reduce to risk of otherwise relatively firm cohesive subgrades from deteriorating when exposed to water and repeated construction traffic, consideration should be given to the timing of the removal of the existing surficial elements relative to preparation of the subgrade, precipitation, and sequencing of other activities.

Where soft/yielding conditions are encountered in areas of new pavement, we anticipate that they can be addressed via the subgrade treatment. Where soft/yielding conditions are encountered outside of the subgrade treatment limits at the base of new embankment fill, additional improvement will be required to prepare the ground for fill placement. Soft/yielding conditions are anticipated to be common beyond the toe of the existing embankment. The severity of the soft conditions will depend, in part, on the climatic conditions at the time of construction and will be further influenced by the construction practices by the contractor. Even relatively stiff subgrades will deteriorate under repeated construction traffic or exposure to moisture.

Conventional improvement via discing and drying may be feasible pending favorable conditions and considering the available working space. However, even under favorable conditions, improvement

via discing and drying is anticipated to require an appreciable amount of time. In order to control the schedule risks associated with discing, drying, and recompacting, we recommend that these areas be improved via undercut and replacement with compacted B Borrow to a depth of up to 12 in. The B Borrow can “bridge” any remaining softer conditions and provide a suitable base for placement of new fill and/or pavement.

The final decision regarding this treatment should be made at the time of construction based on the conditions encountered, including consideration being given to weather. We recommend that EEI be retained during construction to observe the actual exposed soil conditions and provide field guidance regarding the appropriate treatment. For your estimating purposes, we recommend including quantities for undercut and replacement with B Borrow to a depth of 12 in. over the area between the existing toe and proposed toe of the embankment.

#### Embankment Fill Placement and Compaction

Sideslopes are planned to be established at 3H:1V with fill heights up to 7 ft. Standard embankment construction practices outlined in the ISS and with a subgrade prepared as discussed above should provide adequate support for embankment construction. We recommend that fill used to raise grades be placed in loose lift thicknesses not exceeding 8 in. and be compacted to no less than 95 percent of the maximum density obtained in accordance with AASHTO T 99.

Except for the soils containing organic matter (e.g., topsoil), the in-situ soils observed at the test boring locations are suitable for reuse as embankment fill. However, based on review of the cross-sections, the majority of the fill is anticipated to be imported from an offsite source. The contractor is responsible for verifying the adequacy of the borrow material. In general, the moisture content of the in-situ cohesive soil is anticipated to be above the estimated optimum moisture content. Therefore, drying (by continuous discing and aerating or chemical treatment) of the cohesive fill will be required before placement if these soils are utilized. Under some climatic conditions, such as cold or rainy weather, or in confined areas, adequate moisture conditioning may be difficult to achieve, and in this case, granular fill or chemical drying could be required to expedite construction activities.

We recommend that benches be cut into any existing slopes steeper than 4H:1V before fill placement so as to key the new fill into the slope. In our opinion, benches having a minimum width of 10 ft should be cut into the slope before new fill is placed. Where 10-ft wide benches are not feasible due to steep sideslopes and/or granular conditions, 4-ft wide benches (i.e., minimum) are recommended. Scarifying of the slope will also aid in keying the new fill into the slope.

Provided the subgrades are prepared and fill placed and compacted as discussed above, we do not take exception to the embankment slopes as planned. Embankment slopes of 3H:1V are not anticipated to pose a risk with regards to global instability. To minimize sloughing and erosion, it is important to provide adequate compaction and erosion protection at the face of the embankment.

#### **Bridge Foundation Considerations**

Based on the subsurface conditions observed at the boring locations and the use of semi-integral end bents, we concur with the use of additional SEC piles for support of the bridge. Individual pile loads are not known at this time. We understand that the bridge will be designed using Load Factor

Design (LFD) methodology in accordance with the 17<sup>th</sup> Edition of AASHTO. The information provided in the table below provides design soil resistances for a range of pile loads for the new piles.

**Table 1: Summary of Design and Pile Driving Resistances**

	Bent Nos. 1 and 5		
Pile Size and Type	SEC 14 in. x 0.312 in.		
Design (Service) Load (kips)	80	120	168 <sup>2</sup>
Factor of Safety (FS) <sup>1</sup>	2.5		
Downdrag Load - DD (kips)	N/A	N/A	N/A
Downdrag Friction - $R_{sdd}$ (kips)	N/A	N/A	N/A
Scour Zone Friction - $R_{s\ scour}$ (kips)	N/A	N/A	N/A
Relaxation in Shale (kips)	N/A	N/A	N/A
Ultimate Pile Load (kips)	200	300	420
Estimated Pile Tip Elevation	805	798	792 – Bent 1 796 – Bent 5

<sup>1</sup>Driving resistance verified via ISS 701.05(a)

<sup>2</sup>Loads and resistances in this column should be considered maximum for this pile type.

We recommend that piles be spaced a minimum of three times the pile diameter as specified by IDM 408-3.04(02). We also recommend the use of conical pile tips in accordance with ISS 915.01(a)2. In addition, we recommend that indicator piles be used at both end bents and that the piles be restruck no sooner than 72 hrs after initial driving.

### Seismic Considerations

For your consideration of seismic loads and in accordance with Section 3.5 of AASHTO Standard Specifications for Highway Bridges, 17<sup>th</sup> Edition (2002), the conditions reported at the test boring locations correspond to a Soil Profile Type II. Considering an Acceleration Coefficient (A) of 0.05, this corresponds to a Seismic Performance Category A.

### Pavement Design Considerations

Based on the existing and proposed grading, the roadway subgrade is anticipated consist primarily of embankment fill. As such, and because imported borrow is anticipated to be required, resilient modulus testing was not performed. Based on the nature of the project and projected traffic volumes, we recommend that the information in the table below be considered for pavement design.

**Table 2: Soil Parameters for Pavement Design**

Resilient Modulus ( $M_r$ ) for Improved Subgrade	10,000 psi
Resilient Modulus ( $M_r$ ) for Natural Subgrade	4,000 psi
Assumed Soil Type	Loam
Percent Passing No. 200 Sieve	50 percent
Percent Silt	40 percent
Liquid Limit (LL)	22
Plastic Limit (PL)	18
Plasticity Index (PI)	4
Depth to Water	6 ft
Natural Dry Density of Subgrade	125 pcf
Moisture Content of Subgrade	14 percent
Organic Content	n/a
Marl Content	n/a
Soluble Sulfate Content	n/a
Depth to Rock	>10 ft
Recommended Subgrade Treatment	Type IC

As you are aware, it is important to provide positive drainage during construction before the subgrade treatment is performed in order to reduce the risk of wet soil conditions. Considering the presence of moisture-sensitive cohesive soils at the subgrade, water infiltration will reduce the life of a pavement section. Since these soils have a low permeability, any water which infiltrates the subgrade will affect the long-term performance of the pavement. As a result, we recommend the use of subsurface pavement drains, particularly if they are present in the existing roadway and would, therefore, need to be matched/extended. If drains are not used, we recommend that drainage stone (subbase) extend to the face of the embankment for "daylighting."

The plans indicate that the majority of the existing pavement is planned to remain in place and be resurfaced. Consideration should be given to the potential damage to the pavement caused by construction traffic, particularly if the crane is planned to be staged on the pavement. Full reconstruction within the project limits may be prudent.

### **Excavations and Dewatering**

Excavations are anticipated to be relatively shallow and within cohesive soil. Granular soil will also be encountered particularly within the existing embankment fill (refer to Boring TB-1). The excavations will require sloped sides. Soil should not be stockpiled immediately adjacent to the top of the excavations, and all excavations should conform with Occupational Safety and Health Administration (OSHA) requirements (i.e., 29 CFR Part 1926). The Contractor is solely responsible for constructing and maintaining stable excavations.

Groundwater infiltration into the excavations is generally anticipated to be relatively slow and can likely be handled via traditional dewatering methods (e.g., via a pump and filtered sump in a collection trench). Based on the preliminary plans, excavations are not anticipated to extend into the wet granular soil. Any excavations that extend below the water level of the creek pose a risk of exposing wet granular soil which will require extensive dewatering methods.

### CONCLUDING REMARKS

In closing, we recommend that EEI be provided the opportunity to review the final design and project specifications to confirm that earthwork and foundation requirements have been properly interpreted and implemented in the design and specifications. We also recommend that EEI be retained to provide construction observation services during the earthwork and foundation construction phases of the project. This will allow us to verify that the construction proceeds in compliance with the design concepts, specifications and recommendations. It will also allow design changes to be made in the event that subsurface conditions differ from those anticipated.

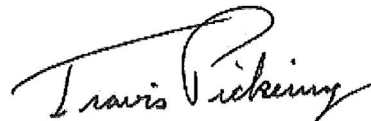
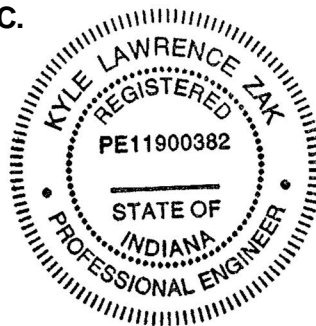
We appreciate the opportunity to provide our services to you on this project. Please contact our office if you have any questions or need further assistance with the project.

Sincerely,

**EARTH EXPLORATION, INC.**



Kyle L. Zak, P.E.  
Project Engineer



Travis J. Pickering, P.E.  
Senior Staff Engineer

Attachments –

- APPENDIX A - Important Information about This Geotechnical Engineering Report
- APPENDIX B - Field Methods for Exploring and Sampling Soils and Rock
- APPENDIX C - Exploratory Location Plan (Drawing No. CJ185650.B1)
  - Log of Test Boring – General Notes
  - Log of Test Boring (4)
  - Summary of Hand Auger Borings
  - Unconfined Compression Test (4)

## **APPENDIX A**

IMPORTANT INFORMATION ABOUT THIS  
GEOTECHNICAL ENGINEERING REPORT

# Important Information about This Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

**The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, you can benefit from a lowered exposure to problems associated with subsurface conditions at project sites and development of them that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed herein, contact your GBA-member geotechnical engineer. Active engagement in GBA exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.**

## Understand the Geotechnical-Engineering Services Provided for this Report

Geotechnical-engineering services typically include the planning, collection, interpretation, and analysis of exploratory data from widely spaced borings and/or test pits. Field data are combined with results from laboratory tests of soil and rock samples obtained from field exploration (if applicable), observations made during site reconnaissance, and historical information to form one or more models of the expected subsurface conditions beneath the site. Local geology and alterations of the site surface and subsurface by previous and proposed construction are also important considerations. Geotechnical engineers apply their engineering training, experience, and judgment to adapt the requirements of the prospective project to the subsurface model(s). Estimates are made of the subsurface conditions that will likely be exposed during construction as well as the expected performance of foundations and other structures being planned and/or affected by construction activities.

The culmination of these geotechnical-engineering services is typically a geotechnical-engineering report providing the data obtained, a discussion of the subsurface model(s), the engineering and geologic engineering assessments and analyses made, and the recommendations developed to satisfy the given requirements of the project. These reports may be titled investigations, explorations, studies, assessments, or evaluations. Regardless of the title used, the geotechnical-engineering report is an engineering interpretation of the subsurface conditions within the context of the project and does not represent a close examination, systematic inquiry, or thorough investigation of all site and subsurface conditions.

## Geotechnical-Engineering Services are Performed for Specific Purposes, Persons, and Projects, and At Specific Times

Geotechnical engineers structure their services to meet the specific needs, goals, and risk management preferences of their clients. A geotechnical-engineering study conducted for a given civil engineer

will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client.

Likewise, geotechnical-engineering services are performed for a specific project and purpose. For example, it is unlikely that a geotechnical-engineering study for a refrigerated warehouse will be the same as one prepared for a parking garage; and a few borings drilled during a preliminary study to evaluate site feasibility will not be adequate to develop geotechnical design recommendations for the project.

*Do not rely on this report if your geotechnical engineer prepared it:*

- for a different client;
- for a different project or purpose;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, the reliability of a geotechnical-engineering report can be affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If you are the least bit uncertain about the continued reliability of this report, contact your geotechnical engineer before applying the recommendations in it. A minor amount of additional testing or analysis after the passage of time – if any is required at all – could prevent major problems.*

## Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read the report in its entirety. Do not rely on an executive summary. Do not read selective elements only. *Read and refer to the report in full.*

## You Need to Inform Your Geotechnical Engineer About Change

Your geotechnical engineer considered unique, project-specific factors when developing the scope of study behind this report and developing the confirmation-dependent recommendations the report conveys. Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the elevation, configuration, location, orientation, function or weight of the proposed structure and the desired performance criteria;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project or site changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept*

responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

### Most of the “Findings” Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site’s subsurface using various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing is performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgement to form opinions about subsurface conditions throughout the site. Actual site-wide subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team through project completion to obtain informed guidance quickly, whenever needed.

### This Report’s Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, they are not final, because the geotechnical engineer who developed them relied heavily on judgement and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* exposed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

### This Report Could Be Misinterpreted

Other design professionals’ misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a continuing member of the design team, to:

- confer with other design-team members;
- help develop specifications;
- review pertinent elements of other design professionals’ plans and specifications; and
- be available whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction-phase observations.

### Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note*

*conspicuously that you’ve included the material for information purposes only.* To avoid misunderstanding, you may also want to note that “informational purposes” means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

### Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. This happens in part because soil and rock on project sites are typically heterogeneous and not manufactured materials with well-defined engineering properties like steel and concrete. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled “limitations,” many of these provisions indicate where geotechnical engineers’ responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

### Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a “phase-one” or “phase-two” environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually provide environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not obtained your own environmental information about the project site, ask your geotechnical consultant for a recommendation on how to find environmental risk-management guidance.

### Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, the engineer’s services were not designed, conducted, or intended to prevent migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, *proper implementation of the geotechnical engineer’s recommendations will not of itself be sufficient to prevent moisture infiltration.* Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. *Geotechnical engineers are not building-envelope or mold specialists.*



GEOPROFESSIONAL  
BUSINESS  
ASSOCIATION

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## **APPENDIX B**

FIELD METHODS FOR EXPLORING AND SAMPLING SOILS AND ROCK

## **FIELD METHODS FOR EXPLORING AND SAMPLING SOILS AND ROCK**

### **A. Boring Procedures Between Samples**

The boring is extended downward, between samples, by a hollow stem auger (AASHTO\* Designation T251), continuous flight auger, driven and washed-out casing, or rotary boring with drilling mud or water.

### **B. Standard Penetration Test and Split-Barrel Sampling of Soils**

(AASHTO\* Designation: T206)

This method consists of driving a 2-in. outside diameter split-barrel sampler using a 140-lb weight falling freely through a distance of 30 in. The sampler is first seated 6 in. into the material to be sampled and then driven 12 in. The number of blows required to drive the sampler the final 12 in. is recorded on the Log of Test Boring and known as the Standard Penetration Resistance or N-value. Recovered samples are first classified as to texture by the field personnel. Later in the laboratory, the field classification is reviewed by a geotechnical engineer who observes each sample.

### **C. Thin-walled Tube Sampling of Soils**

(AASHTO\* Designation: T207)

This method consists of hydraulically pushing a 2-in. or 3-in. outside diameter thin wall tube into the soil, usually cohesive types. Relatively undisturbed samples are recovered.

### **D. Soil Investigation and Sampling by Auger Borings**

(AASHTO\* Designation: T203)

This method consists of augering a hole and removing representative soil samples from the auger flight or bucket at 5-ft intervals or with each change in the substrata. Relatively disturbed samples are obtained and its use is therefore limited to situations where it is satisfactory to determine approximate subsurface profile.

### **E. Diamond Core Drilling for Site Investigation**

(AASHTO\* Designation: T225)

This method consists of advancing a hole in rock or other hard strata by rotating downward a single tube or double tube core barrel equipped with a cutting bit. Diamond, tungsten carbide, or other cutting agents may be used for the bit. Wash water is used to remove the cuttings. Normally, a 3-in. outside diameter by 2-in. inside diameter coring bit is used unless otherwise noted. The rock or hard material recovered within the core barrel is examined in the field and laboratory. Cores are stored in partitioned boxes and the length of recovered material is expressed as a percentage of the actual distance penetrated.

\* American Association of State Highway and Transportation Officials, Washington D.C.

## **APPENDIX C**

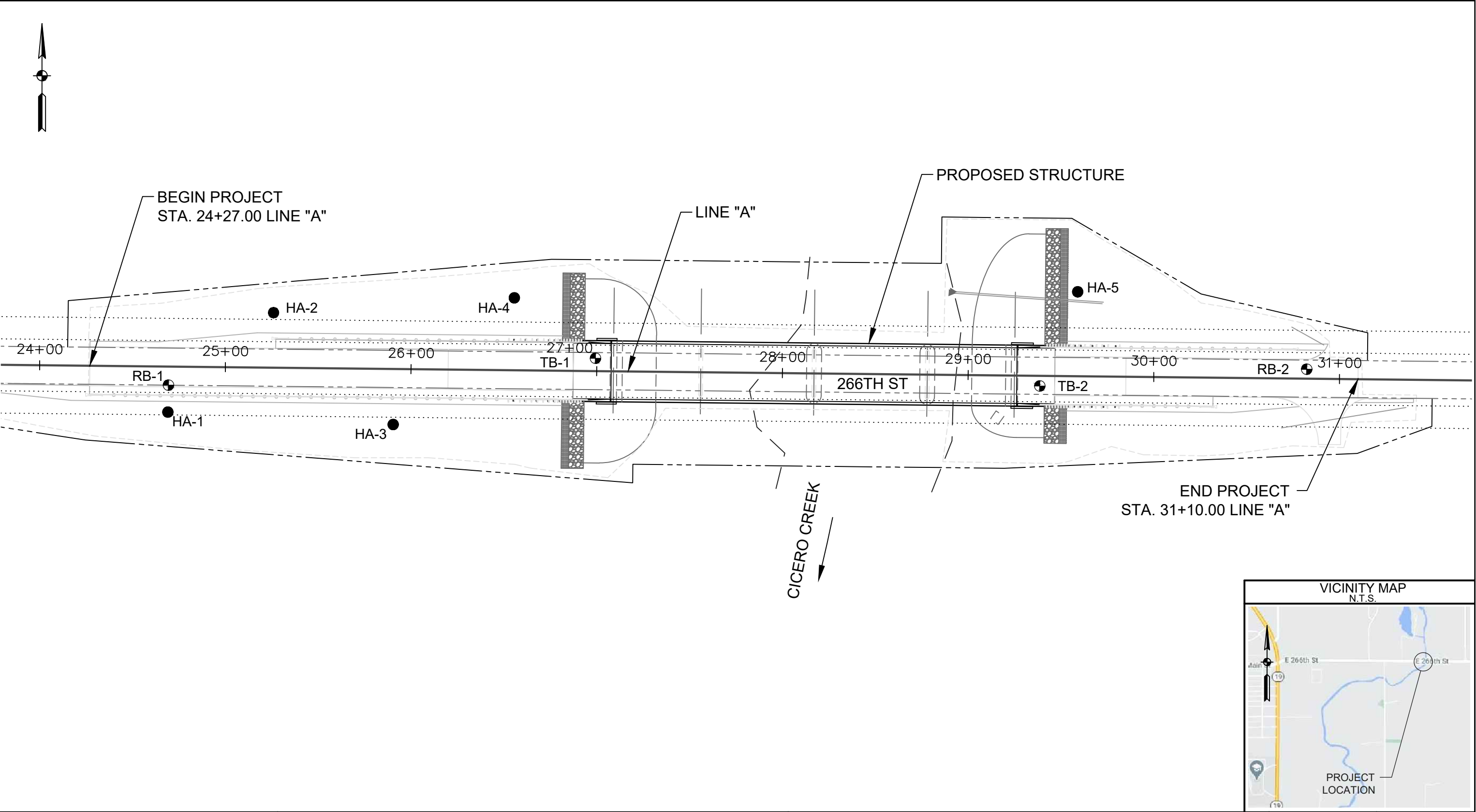
EXPLORATORY LOCATION PLAN  
(Drawing No. CJ185650.B1)




LOG OF TEST BORING - GENERAL NOTES

LOG OF TEST BORING (4)

SUMMARY OF HAND AUGER BORINGS

UNCONFINED COMPRESSION TEST (4)



LEGEND			NOTES	EXPLORATORY LOCATION PLAN		PROJECT ENG: KLZ	<div>EARTH EXPLORATION</div> <div>A Terracon COMPANY</div>
RB-1		Test Boring Location and Designation	<div>1. Base map developed from an electronic file provided by DLZ Indiana, LLC.</div> <div>2. Vicinity map generated using imagery from google.com/maps.</div> <div>3. Exploratory locations were located in the field by Earth Exploration, A Terracon Company.</div> <div>4. Ground surface elevations at the exploratory locations were interpolated to the nearest 1 ft based on topographic information obtained from plans provided by DLZ Indiana, LLC.</div> <div>5. Exploratory locations are approximate.</div>	PROJECT:	266th Street over Cicero Creek	APPROVED BY:	
				LOCATION:	Hamilton County, Indiana	TJP	
HA-2		Hand Auger Boring Location and Designation		CLIENT:	DLZ Indiana, LLC	DRAWN BY:	
				STRUCTURE NO.:	Hamilton 72	JLJ	
				PROJECT NO.:	E-18-0005	DATE:	
			EEI PROJ. NO.:	CJ185650	8/25/20	DRAWING NO.:	
			SCALE:	1" = 50'	CJ185650.B1		

# LOG OF TEST BORING – GENERAL NOTES

## DESCRIPTIVE CLASSIFICATION

### GRAIN SIZE TERMINOLOGY

Soil Fraction	Particle Size	US Standard Sieve Size
Boulders .....	Larger than 75 mm .....	Larger than 3"
Gravel .....	4.76 mm to 75 mm .....	#10 to 75 mm
Sand: Coarse .....	2.00 to 4.76 mm .....	#40 to #10
Fine .....	0.075 to 0.42 mm .....	#200 to #40
Silt .....	0.002 to 0.075 mm .....	Smaller than #200
Clay .....	Smaller than 0.002 mm .....	Smaller than #200

### GENERAL TERMINOLOGY

Physical Characteristics  
- Color, moisture, grain shape  
  fineness, etc.  
Major Constituents  
- Clay silt, sand, gravel  
Structure  
- Laminated, varved, fibrous,  
  stratified, cemented, fissured,  
  etc.  
Geologic Origin  
- Glacial, alluvial, eolian,  
  residual, etc.

### RELATIVE PROPORTIONS OF COHESIONLESS SOILS

Term	Defining Range by % of Weight
Trace .....	1 – 10%
Little .....	11 – 20%
Some .....	21 – 35%
And .....	36 – 50%

### ORGANIC CONTENT BY COMBUSTION METHOD

Soil Description	LOI
w/ organic matter .....	4 – 15 %
Organic Soil (A-8) .....	16 – 30%
Peat (A-8) .....	More than 30%

The penetration resistance, N, is the summation of the number of blows required to effect two successive 6-in. penetrations of the 2-in. split-barrel sampler. The sampler is driven with a 140-lb weight falling 30 in. and is seated to a depth of 6 in. before commencing the standard penetration test.

## SYMBOLS

### DRILLING AND SAMPLING

AS	–	Auger Sample
BS	–	Bag Sample
C	–	Casing Size 2½", NW, 4", HW
COA	–	Clean-Out Auger
CS	–	Continuous Sampling
CW	–	Clear Water
DC	–	Driven Casing
DM	–	Drilling Mud
FA	–	Flight Auger
FT	–	Fish Tail
HA	–	Hand Auger
HSA	–	Hollow Stem Auger
NR	–	No Recovery
PMT	–	Borehole Pressuremeter Test
PT	–	3" O.D. Piston Tube Sample
PTS	–	Peat Sample
RB	–	Rock Bit
RC	–	Rock Coring
REC	–	Recovery
RQD	–	Rock Quality Designation
RS	–	Rock Sounding
S	–	Soil Sounding
SS	–	2" O.D. Split-Barrel Sample
2ST	–	2" O.D. Thin-Walled Tube Sample
3ST	–	3" O.D. Thin-Walled Tube Sample
VS	–	Vane Shear Test
WPT	–	Water Pressure Test

### LABORATORY TESTS

q <sub>p</sub>	–	Penetrometer Reading, tsf
q <sub>u</sub>	–	Unconfined Strength, tsf
W	–	Moisture Content, %
LL	–	Liquid Limit, %
PL	–	Plastic Limit, %
PI	–	Plasticity Index
SL	–	Shrinkage Limit, %
LOI	–	Loss on Ignition, %
γ <sub>d</sub>	–	Dry Unit Weight, pcf
pH	–	Measure of Soil Alkalinity/Acidity

### WATER LEVEL MEASUREMENT

BF	–	Backfilled upon Completion
NW	–	No Water Encountered

Note: Water level measurements shown on the boring logs represent conditions at the time indicated and may not reflect static levels, especially in cohesive soils.



# LOG OF TEST BORING

Project **266th Street over Cicero Creek**  
 Location **Hamilton Co., IN**  
 Client **DLZ Indiana, LLC**  
 7770 West New York Street - Indianapolis, Indiana 46214  
 317-273-1690 / 317-273-2250 (Fax)

Boring No. **RB-1**  
 Elevation **830**  
 Datum **NAVD 88**  
 EEI Proj. No. **CJ185650**  
 Sheet **1** of **1**

Proj. No. **E-18-0005** Station **24+69** Weather **Cloudy** Driller **T.M.**  
 Struct. No. **Hamilton 72** Offset **10' Rt. "A"** Temp. **70° F** Inspector **---**

SAMPLE					DESCRIPTION/CLASSIFICATION and REMARKS	SOIL PROPERTIES							
No.	Type	Rec %	N Value	Depth ft Elev		q <sub>p</sub> tsf	q <sub>u</sub> tsf	γ <sub>d</sub> pcf	W %	LL %	PL %	PI %	
					ASPHALTIC CONCRETE								
SS-1	X	85	9		GRANULAR SUBBASE, (crushed stone)	1½			14.1	22	18	4	
					LOAM, stiff, moist, brown (fill)								
SS-2	X	65	15			1			17.1				
				5 825	CLAY LOAM, stiff, moist, brown								
SS-3	X	40	7			1¼			23.6				
SS-4	X	100	6			1¾			21.0				
				10 820	End of Boring at 10 ft								

WATER LEVEL OBSERVATIONS				GENERAL NOTES					
Depth ft	▽ While Drilling	▼ Upon Completion	▽ BF After Drilling	Start	8/3/20	End	8/3/20	Rig	CME 55
To Water	NW	NW		Drilling Method	3¼" I.D. HSA			Truck	
To Cave-in		8		Remarks	Backfilled with auger cuttings and concrete patch at surface.				
The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.									




# LOG OF TEST BORING

Project **266th Street over Cicero Creek**  
 Location **Hamilton Co., IN**  
 Client **DLZ Indiana, LLC**  
 7770 West New York Street - Indianapolis, Indiana 46214  
 317-273-1690 / 317-273-2250 (Fax)

Boring No. **RB-2**  
 Elevation **843**  
 Datum **NAVD 88**  
 EEI Proj. No. **CJ185650**  
 Sheet **1** of **1**

Proj. No. **E-18-0005** Station **30+82** Weather **Overcast** Driller **D.C.**  
 Struct. No. **Hamilton 72** Offset **5' Lt. "A"** Temp. **80° F** Inspector **---**

SAMPLE					DESCRIPTION/CLASSIFICATION and REMARKS	SOIL PROPERTIES									
No.	Type	Rec %	N Value	Depth ft Elev		q <sub>p</sub> tsf	q <sub>u</sub> tsf	γ <sub>d</sub> pcf	W %	LL %	PL %	PI %			
						ASPHALTIC CONCRETE									
SS-1	X	55	26			GRANULAR SUBBASE, (crushed stone)									
						SAND AND GRAVEL, medium dense, moist, brown (fill)									
SS-2	X	55	14	840			1¼		11.0						
				5											
SS-3	X	80	30			CLAY LOAM, stiff to hard, moist, brown	>4½		9.4	18	14	4			
				835											
SS-4	X	90	26				4½		9.1						
				10											
					End of Boring at 10 ft										

WATER LEVEL OBSERVATIONS				GENERAL NOTES	
Depth ft	▽ While Drilling	▼ Upon Completion	▽ BF After Drilling	Start 7/20/20	End 7/20/20 Rig CME 55
To Water	NW	NW		Drilling Method 3¼" I.D. HSA	Truck
To Cave-in		7		Remarks Backfilled with auger cuttings and concrete patch at surface.	
The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual					



# LOG OF TEST BORING

Project **266th Street over Cicero Creek**  
 Location **Hamilton Co., IN**  
 Client **DLZ Indiana, LLC**  
 7770 West New York Street - Indianapolis, Indiana 46214  
 317-273-1690 / 317-273-2250 (Fax)

Boring No. **TB-1**  
 Elevation **835**  
 Datum **NAVD 88**  
 EEI Proj. No. **CJ185650**  
 Sheet **1** of **2**

Proj. No. **E-18-0005** Station **27+00** Weather **Overcast** Driller **D.C.**  
 Struct. No. **Hamilton 72** Offset **7' Lt. "A"** Temp. **80° F** Inspector **---**

SAMPLE					DESCRIPTION/CLASSIFICATION and REMARKS	SOIL PROPERTIES							
No.	Type	Rec %	N Value	Depth ft Elev		q <sub>p</sub> tsf	q <sub>u</sub> tsf	γ <sub>d</sub> pcf	W %	LL %	PL %	PI %	
					ASPHALTIC CONCRETE								
SS-1	X	35	4		PORTLAND CEMENT CONCRETE, with rebar	2			11.7				
SS-2	X	80	12		SAND AND GRAVEL, very loose to medium dense, moist, brown, with loam seam near 1½ ft (fill)								
				5 830									
SS-3	X	65	13		SANDY LOAM, medium stiff, moist, brown (fill)	½			11.3				
					SAND AND GRAVEL, loose, moist, brown (fill)								
SS-4	X	80	7		CLAY LOAM, medium stiff, moist, brown	½			23.2				
				10 825									
					SANDY LOAM, medium stiff, moist, grayish brown								
SS-5	X	90	6			½			18.0				
				15 820									
SS-6	X	80	24		SAND AND GRAVEL, medium dense to loose, moist to wet below 18 ft, brown								
				20 815									
SS-7	X	90	10										
				25 810									
SS-8	X	90	21		GRAVELLY SAND, medium dense, wet, brown								
				30 805									
SS-9	X	90	24										
				35 800									

Continued Next Page

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WATER LEVEL OBSERVATIONS					GENERAL NOTES	
Depth ft	▽ While Drilling	▼ Upon Completion	▽ BF After Drilling		Start <b>7/20/20</b> End <b>7/20/20</b> Rig <b>CME 55</b>	
To Water	<b>18</b>	<b>13</b>			Drilling Method <b>3¼" I.D. HSA</b> Truck	
To Cave-in		<b>18</b>			Remarks <b>Backfilled with auger cuttings and concrete patch at surface.</b>	
The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.						





# LOG OF TEST BORING

Project ..... **266th Street over Cicero Creek**  
 Location ..... **Hamilton Co., IN**  
 Client ..... **DLZ Indiana, LLC**  
 7770 West New York Street - Indianapolis, Indiana 46214  
 317-273-1690 / 317-273-2250 (Fax)

Boring No. .... **TB-1**  
 Elevation ..... **835**  
 Datum ..... **NAVD 88**  
 EEI Proj. No. .... **CJ185650**  
 Sheet ..... **2** of ..... **2**

Proj. No. .... **E-18-0005** Station ..... **27+00** Weather ..... **Overcast** Driller ..... **D.C.**  
 Struct. No. .... **Hamilton 72** Offset ..... **7' Lt. "A"** Temp. .... **80° F** Inspector ..... **---**

SAMPLE					DESCRIPTION/CLASSIFICATION and REMARKS	SOIL PROPERTIES							
No.	Type	Rec %	N Value	Depth ft Elev		q <sub>p</sub> tsf	q <sub>u</sub> tsf	γ <sub>d</sub> pcf	W %	LL %	PL %	PI %	
					GRAVELLY SAND, medium dense, wet, brown								
SS-10	X	80	28										
				40 795	SANDY LOAM, hard, moist, brown								
SS-11	X	65	29			4		134.4	8.7				
				45 790									
SS-12	X	80	27			>4½	6.54	129.3	11.5				
				50 785									
SS-13	X	90	71			>4½			10.9	25	15	10	
				55 780	CLAY LOAM, hard to stiff, moist, brown, with clay seam near 70 ft, with cobbles								
SS-14	X	85	50/5			1½	1.58	125.1	13.1				
				60 775									
SS-15	X	85	50/5			1			16.3				
				65 770									
SS-16	X	80	53			2½			20.0				
				70 765	End of Boring at 70 ft								

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.



# LOG OF TEST BORING

Project ..... **266th Street over Cicero Creek**  
 Location ..... **Hamilton Co., IN**  
 Client ..... **DLZ Indiana, LLC**  
 7770 West New York Street - Indianapolis, Indiana 46214  
 317-273-1690 / 317-273-2250 (Fax)

Boring No. .... **TB-2**  
 Elevation ..... **840**  
 Datum ..... **NAVD 88**  
 EEI Proj. No. .... **CJ185650**  
 Sheet ..... **1** of ..... **2**

Proj. No. .... **E-18-0005** Station ..... **29+39** Weather ..... **Cloudy** Driller ..... **T.M.**  
 Struct. No. .... **Hamilton 72** Offset ..... **6' Rt. "A"** Temp. .... **72° F** Inspector ..... **---**

SAMPLE					DESCRIPTION/CLASSIFICATION and REMARKS	SOIL PROPERTIES							
No.	Type	Rec %	N Value	Depth ft Elev		q <sub>p</sub> tsf	q <sub>u</sub> tsf	γ <sub>d</sub> pcf	W %	LL %	PL %	PI %	
					ASPHALTIC CONCRETE								
SS-1	X	0	8										
SS-2	X	45	7	5 835		4			11.6				
SS-3	X	100	15			2½			9.3				
SS-4	X	85	14	10 830		1¾			9.6				
					CLAY LOAM, hard to stiff, moist, brown, gray below 13.5 ft (fill to 6 ft)								
SS-5	X	100	19	15 825		>4½			10.1				
SS-6	X	100	20	20 820		2½			11.7				
SS-7	X	30	26	25 815	SANDY LOAM and Gravel, medium dense, moist, wet below 26 ft, brown	3¾			11.9				
SS-8	X	45	25	30 810									
						SAND AND GRAVEL, dense, wet, brown							
SS-9	X	90	32	35 805									

Continued Next Page

Continued Next Page

WATER LEVEL OBSERVATIONS					GENERAL NOTES	
Depth ft	▽ While Drilling	▼ Upon Completion	▽ BF After Drilling		Start 8/3/20 End 8/3/20 Rig CME 55	
To Water	26	16			Drilling Method 3¼" I.D. HSA Truck	
To Cave-in		24			Remarks Backfilled with auger cuttings and concrete patch at surface.	
The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.						






# LOG OF TEST BORING

Project ..... **266th Street over Cicero Creek**  
 Location ..... **Hamilton Co., IN**  
 Client ..... **DLZ Indiana, LLC**  
 7770 West New York Street - Indianapolis, Indiana 46214  
 317-273-1690 / 317-273-2250 (Fax)

Boring No. .... **TB-2**  
 Elevation ..... **840**  
 Datum ..... **NAVD 88**  
 EEI Proj. No. .... **CJ185650**  
 Sheet ..... **2** of ..... **2**

Proj. No. .... **E-18-0005** Station ..... **29+39** Weather ..... **Cloudy** Driller ..... **T.M.**  
 Struct. No. .... **Hamilton 72** Offset ..... **6' Rt. "A"** Temp. .... **72° F** Inspector ..... **---**

SAMPLE					DESCRIPTION/CLASSIFICATION and REMARKS	SOIL PROPERTIES						
No.	Type	Rec %	N Value	Depth ft Elev		q <sub>p</sub> tsf	q <sub>u</sub> tsf	γ <sub>d</sub> pcf	W %	LL %	PL %	PI %
					 <b>SAND AND GRAVEL</b> , dense, wet, brown							
SS-10	X	100	41	40 800								
					 <b>CLAY LOAM</b> , hard, moist, brown							
SS-11	X	55	29	45 795		>4½			13.7	20	15	5
SS-12	X	45	33	50 790		4¼			7.6			
SS-13	X	65	75	55 785		>4½			9.9			
					 <b>CLAY</b> , hard, moist, brown							
SS-14	X	80	40	60 780		>4½	7.60	121.4	14.0			
SS-15	X	100	38	65 775		>4½			18.6			
SS-16	X	45	30	70 770		>4½	5.21	114.3	17.8			
					End of Boring at 70 ft							

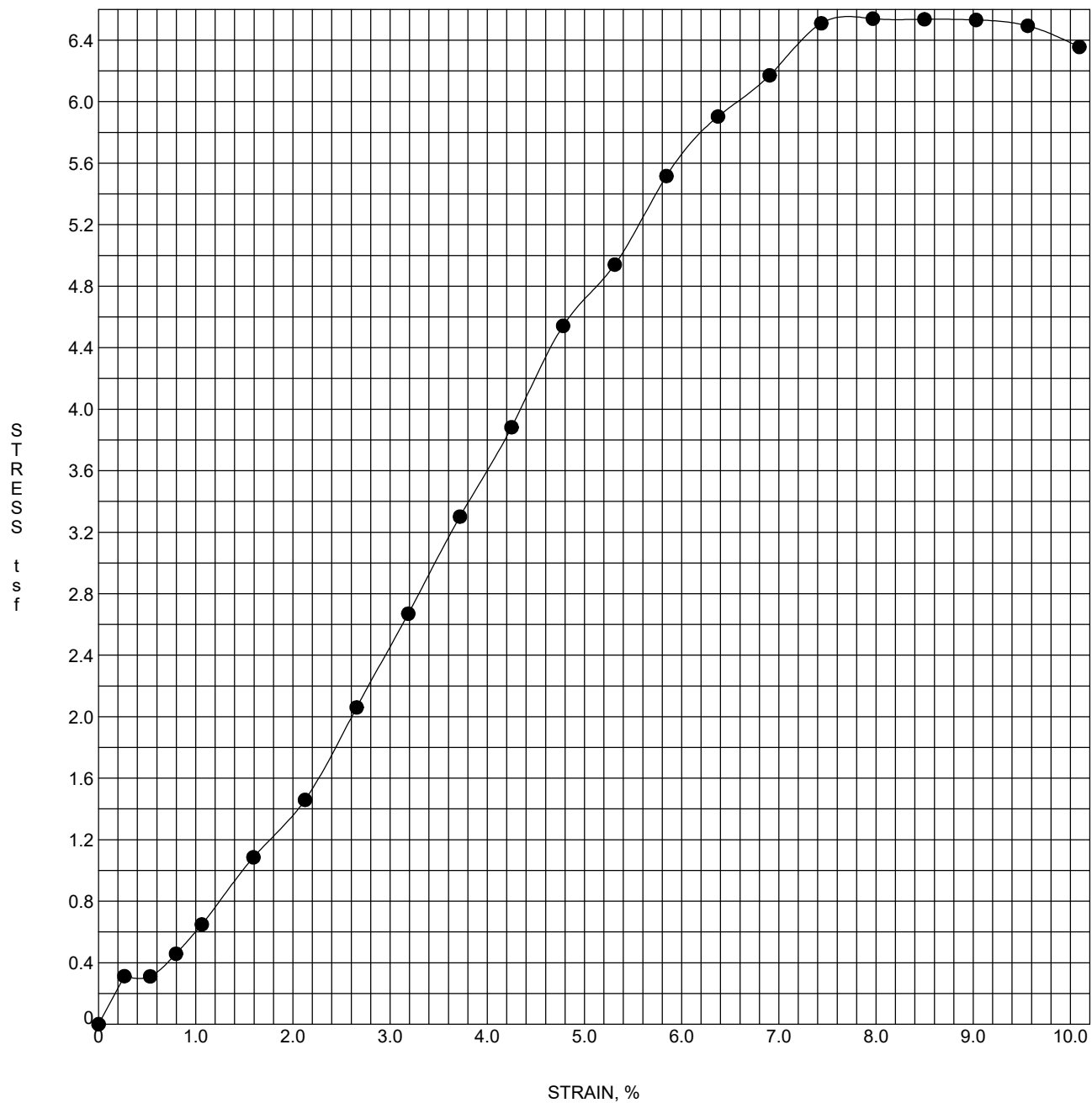
The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

## SUMMARY OF HAND AUGER BORINGS

**Project:** 266<sup>th</sup> Street over Cicero Creek  
**Location:** Hamilton Co., IN  
**Client:** DLZ Indiana, LLC  
**Structure No.:** Hamilton 72  
**EEL Project No.:** CJ185650

Sounding No.	Station	Offset Line "A"	Approx. Ground Surface Elevation	Depth Interval (ft)	Description - All Classifications are visual
HA-1	24+69	25 ft Right	824	0 - ¼ ¼ - 3	Topsoil Clay Loam, soft to stiff below 1 ft, brown, with root fibers above 1 ft (moisture content = 19.8 to 23.9).
HA-2	25+26	30 ft Left	824	0 - ¼ ¼ - 3	Topsoil Clay Loam, soft to stiff below ½ ft, brown, with root fibers throughout (moisture content = 23.5 to 25.8).
HA-3	25+91	30 ft Right	824	0 - ⅓ ⅓ - 3	Topsoil Clay Loam, soft to stiff below ¾ ft, brown, with root fibers throughout (moisture content = 19.9 to 22.7).
HA-4	26+55	38 ft Left	824	0 - ⅓ ⅓ - 3	Topsoil Clay Loam, soft to stiff below 1 ft, brown, with root fibers above 1 ft (moisture content = 23.3 to 26.3).
HA-5	29+59	45 ft Left	824	0 - ¼ ¼ - 3	Topsoil Clay Loam, soft to stiff below 2 ft, brown (moisture content = 20.4 to 26.9).

Note: Consistency description based on ability to advance ½-in diameter steel rod probe



Sample Identification		Station / Offset / Line		Depth, ft		Classification			
●	TB-1 SS-12	27+00 7' Lt. "A"		48.5 - 50.0		CLAY LOAM			
Lab No.	Sample Ht., mm	Sample Diam., mm	Initial M.C., %	Initial Wet Den, pcf	Initial Dry Den, pcf	Sat., %	Unc. Comp. Strength, tsf	Failure Strain, %	Rate of Strain to Failure, %
	67.0	35.3	11.5	144.2	129.3	99.9	6.54	8.0	1.1



**Project No.** E-18-0005

**Project** 266th Street over Cicero Creek

**Structure No.** Hamilton 72

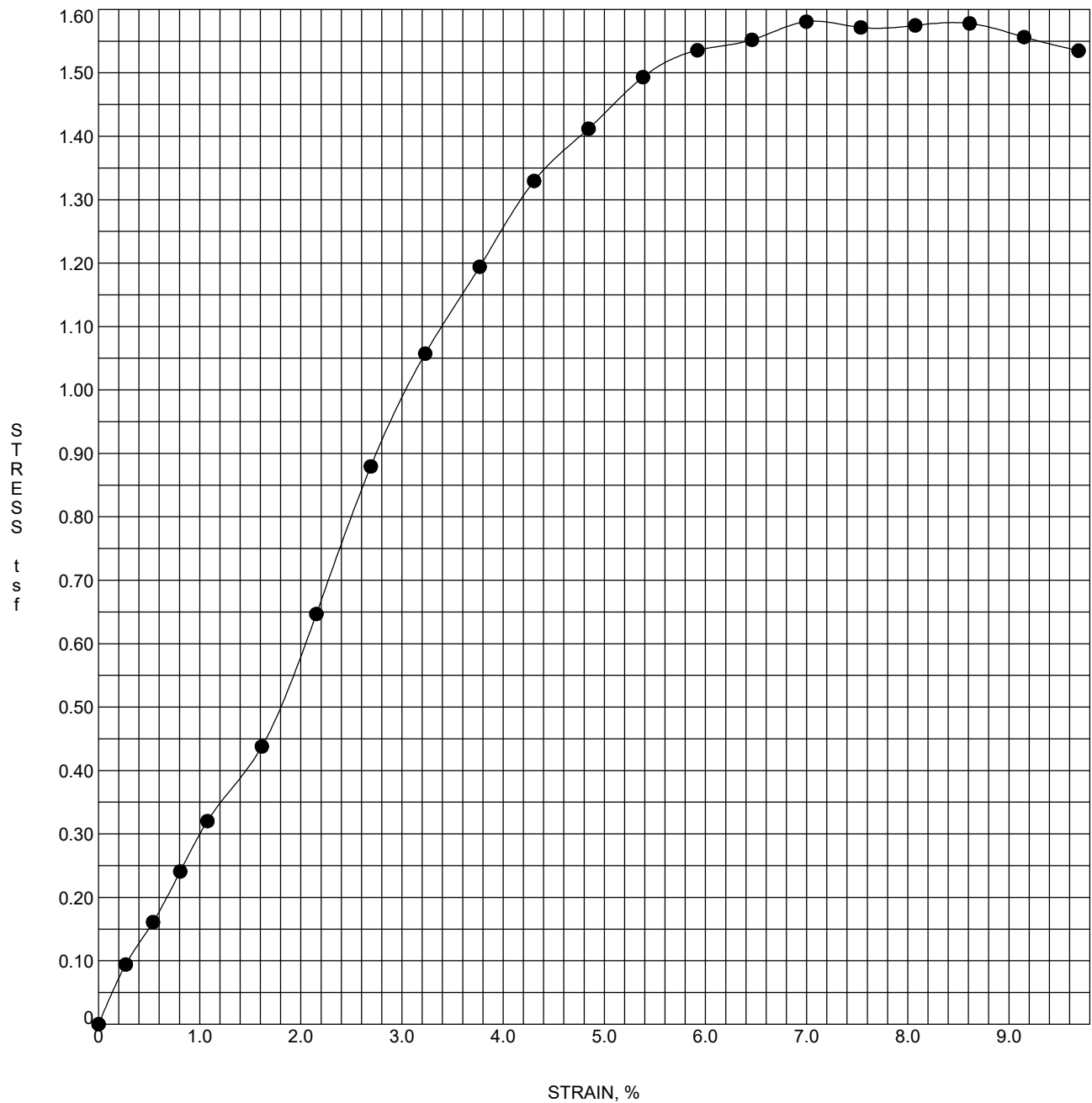
**Location** Hamilton Co., IN

**EEL Proj. No.** CJ185650

**Client** DLZ Indiana, LLC

## UNCONFINED COMPRESSION TEST

Earth Exploration, Inc.  
7770 West New York Street, Indianapolis, IN 46214  
317-273-1690 / 317-273-2250 (Fax)



Sample Identification			Station / Offset / Line			Depth, ft		Classification	
●	TB-1	SS-14	27+00 7' Lt. "A"			58.5 - 58.9		CLAY LOAM	
Lab No.	Sample Ht., mm	Sample Diam., mm	Initial M.C., %	Initial Wet Den, pcf	Initial Dry Den, pcf	Sat., %	Unc. Comp. Strength, tsf	Failure Strain, %	Rate of Strain to Failure, %
	66.1	37.1	13.1	141.6	125.1	99.9	1.58	7.0	1.1



**Project No.** E-18-0005

**Project** 266th Street over Cicero Creek

**Structure No.** Hamilton 72

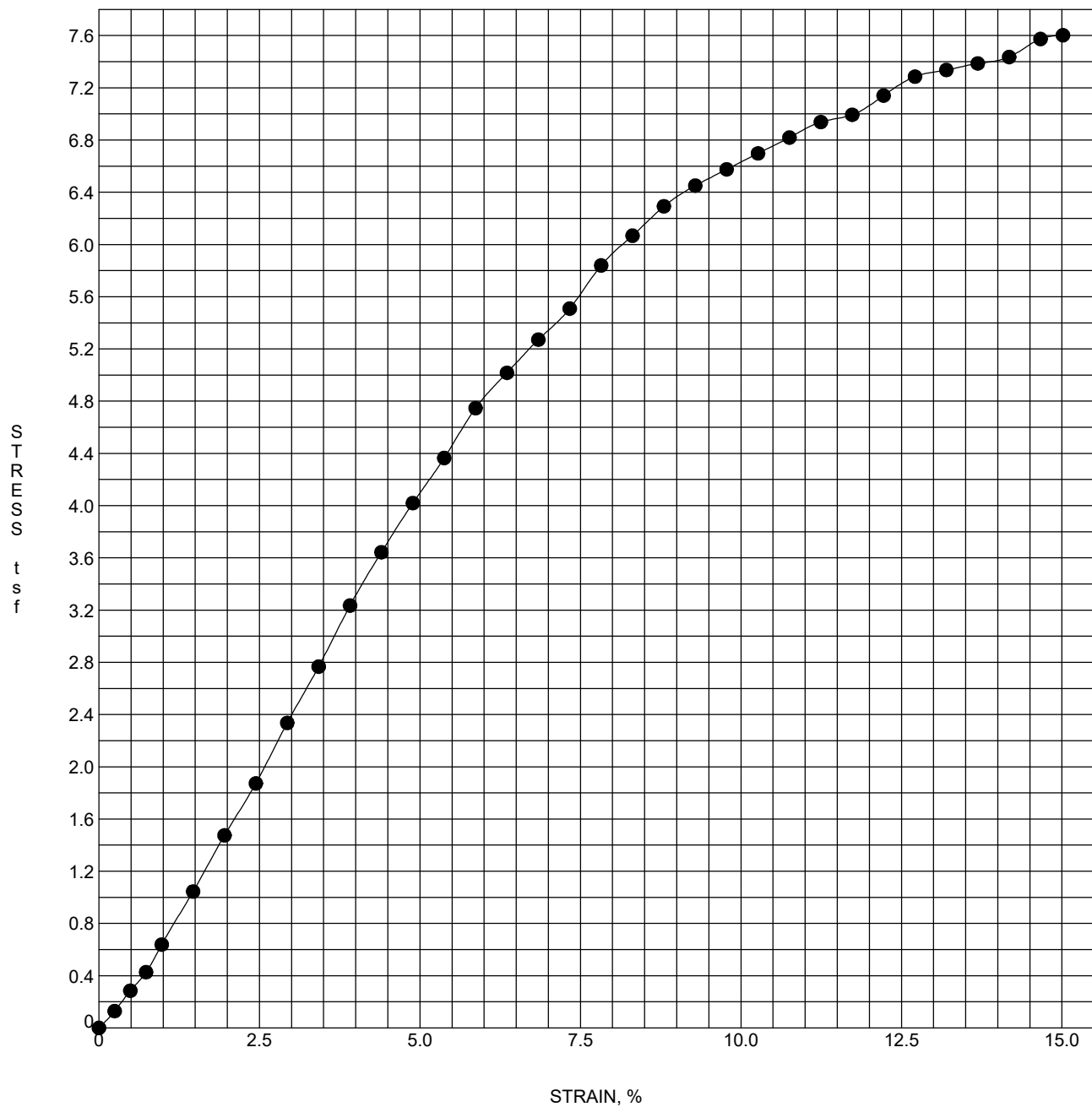
**Location** Hamilton Co., IN

**EEL Proj. No.** CJ185650

**Client** DLZ Indiana, LLC

## UNCONFINED COMPRESSION TEST

Earth Exploration, Inc.  
7770 West New York Street, Indianapolis, IN 46214  
317-273-1690 / 317-273-2250 (Fax)



Sample Identification		Station / Offset / Line			Depth, ft		Classification		
●	TB-2 SS-14	29+39 6' Rt. "A"			58.5 - 60.0		CLAY		
Lab No.	Sample Ht., mm	Sample Diam., mm	Initial M.C., %	Initial Wet Den, pcf	Initial Dry Den, pcf	Sat., %	Unc. Comp. Strength, tsf	Failure Strain, %	Rate of Strain to Failure, %
	72.7	36.0	14.0	138.5	121.4	95.8	7.60	15.0	1.0



**Project No.** E-18-0005

**Project** 266th Street over Cicero Creek

**Structure No.** Hamilton 72

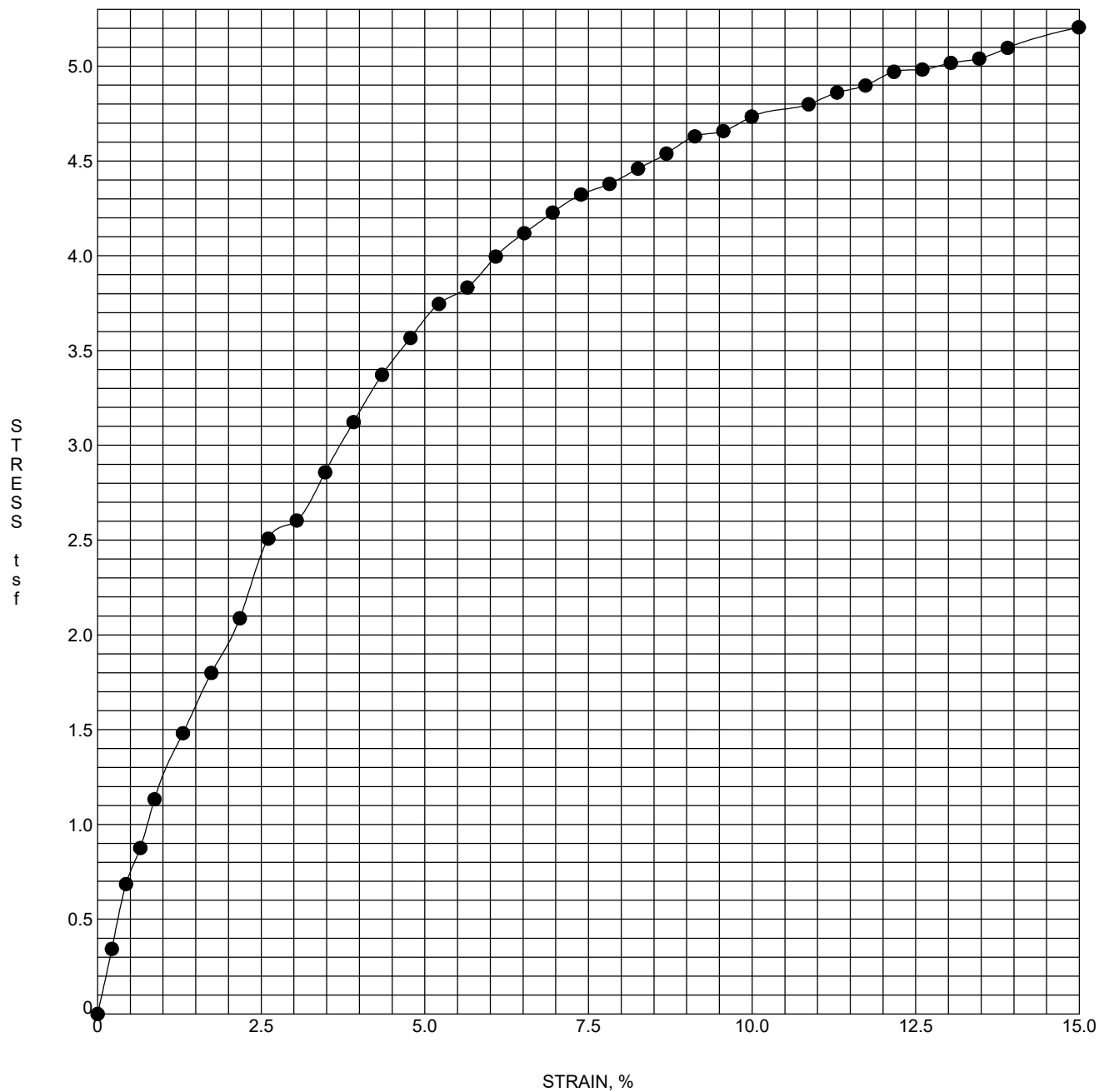
**Location** Hamilton Co., IN

**EEL Proj. No.** CJ185650

**Client** DLZ Indiana, LLC

## UNCONFINED COMPRESSION TEST

Earth Exploration, Inc.  
7770 West New York Street, Indianapolis, IN 46214  
317-273-1690 / 317-273-2250 (Fax)



Sample Identification		Station / Offset / Line		Depth, ft		Classification			
●	TB-2 SS-16	29+39 6' Rt. "A"		68.5 - 70.0		CLAY			
Lab No.	Sample Ht., mm	Sample Diam., mm	Initial M.C., %	Initial Wet Den, pcf	Initial Dry Den, pcf	Sat., %	Unc. Comp. Strength, tsf	Failure Strain, %	Rate of Strain to Failure, %
	81.8	36.8	17.8	134.7	114.3	99.9	5.21	15.0	0.9



**Project No.** E-18-0005

**Project** 266th Street over Cicero Creek

**Structure No.** Hamilton 72

**Location** Hamilton Co., IN

**EEL Proj. No.** CJ185650

**Client** DLZ Indiana, LLC

## UNCONFINED COMPRESSION TEST

Earth Exploration, Inc.  
7770 West New York Street, Indianapolis, IN 46214  
317-273-1690 / 317-273-2250 (Fax)



**APPENDIX C**  
Bridge Asbestos Report

# **REPORT OF ASBESTOS INSPECTION**

**BRIDGE REPLACEMENT  
HAMILTON COUNTY BRIDGE NO. 72  
266th STREET OVER CICERO CREEK  
HAMILTON COUNTY, INDIANA**

## **PREPARED FOR:**

**HAMILTON COUNTY BOARD OF COMMISSIONERS  
1700 S. 10th STREET  
NOBLESVILLE, INDIANA 46060**

## **PREPARED BY:**

**DLZ INDIANA, LLC  
157 E. MARYLAND STREET  
INDIANAPOLIS, IN 46204**

**DLZ NO.: 1863-2011-90**

**MARCH 15, 2019**



**DLZ**

**ENGINEERS • ARCHITECTS • SCIENTISTS  
PLANNERS • SURVEYORS**

# **REPORT OF ASBESTOS INSPECTION**

**BRIDGE REPLACEMENT  
HAMILTON COUNTY BRIDGE NO. 72  
266<sup>th</sup> STREET OVER CICERO CREEK  
HAMILTON COUNTY, INDIANA**

**Prepared For:**

**HAMILTON COUNTY BOARD OF COMMISSIONERS  
1700 S. 10<sup>th</sup> STREET  
NOBLESVILLE, INDIANA 46060**

**Prepared By:**

**DLZ INDIANA, LLC  
157 E. MARYLAND STREET  
INDIANAPOLIS, IN 46204**

**DLZ NO.: 1863-2011-90**

**MARCH 15, 2019**

March 15, 2019

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2.0 PURPOSE ..... 1

3.0 METHODOLOGY ..... 1

4.0 RESULTS..... 2

5.0 CONCLUSIONS AND RECOMMENDATIONS ..... 2

6.0 SIGNATURE OF ASBESTOS INSPECTOR ..... 3

**APPENDICES**

APPENDIX 1 – Figures

APPENDIX 2 - Limitations

March 15, 2019

## **1.0 INTRODUCTION**

DLZ was retained by the Hamilton County Board of Commissioners to conduct an asbestos inspection for the project involving the replacement of Bridge #72. This bridge carries 266<sup>th</sup> Street over Cicero Creek. The location of the above structure is depicted on Figure 1, Appendix 1.

## **2.0 PURPOSE**

The above bridge structure is subject to the facility requirements of the Federal National Emission Standard for Hazardous Air Pollutants (NESHAP) asbestos regulations contained in the Code of Federal Regulations, Title 40, Part 61, Subpart M, (40 CFR 61, Subpart M). The NESHAP regulations require an accredited asbestos inspector to thoroughly inspect the affected facility or the part of the facility where demolition will occur for the presence of asbestos. This includes Category I non-friable and Category II non-friable asbestos containing materials. All regulated asbestos containing materials (RACM) are required to be removed prior to any demolition and/or renovation operations that may result in the disturbance of these materials. The purpose of this Report of Asbestos Inspection is to document the location, quantity and condition of all asbestos containing materials (ACM) that were identified during the asbestos inspection so these materials can be properly handled prior to and during the demolition.

## **3.0 METHODOLOGY**

DLZ conducted the asbestos inspection on March 12, 2019 using an Indiana Department of Environmental Management (IDEM) accredited Asbestos Inspector. DLZ's inspector, Mr. Daniel Stevens, has an IDEM Accreditation Number #19A003455 expiring on March 3, 2020.

DLZ's inspection methodology included the following:

Inspection of the structure for potentially friable and non-friable ACM, delineation of the homogeneous areas (materials that are uniform in color and texture), and the procurement of bulk samples from suspect materials. Samples were only collected from visible, suspect friable ACM and non-friable ACM.

A. Documentation of the inspection process using the Asbestos Inspection Logs that indicate

March 15, 2019

the sample identification number, the sample location, the sample description, the friability of the sample, the sample condition and other comments regarding the suspect ACM bulk sample.

- B. Completion of a chain-of-custody form documenting the sample transport process, and the submittal of the samples to ACM Engineering & Environmental Services in South Bend, Indiana for asbestos analysis.
- C. Analysis of potential ACM containing bulk samples by ACM Engineering & Environmental Services, an approved National Voluntary Laboratory Accreditation Program (NVLAP) laboratory, having a NVLAP code of 101977. Bulk sample analysis was conducted by the Polarized Light Microscopy (PLM) methodology in accordance with the U.S. EPA Method 600/R-39/116.
- D. Bulk sample results are compared to the NESHAP criteria as defined in 40 CFR 61, Subpart M. NESHAP defines an asbestos containing material as any material that contains greater than 1%
- E. A summary of the limitations of the Asbestos Inspection Report are contained in Appendix 2.

#### **4.0 RESULTS**

##### **Hamilton County Bridge #72**

DLZ performed an asbestos inspection of Hamilton County Bridge #72 that carries 266<sup>th</sup> Street over Cicero Creek. No suspect asbestos containing homogenous areas were identified. Therefore, no bulk samples were collected or analyzed.

#### **5.0 CONCLUSIONS AND RECOMMENDATIONS**

Based on the results of the asbestos inspection of Hamilton County Bridge #72 that carries 266<sup>th</sup> Street over Cicero Creek, no visually observed asbestos containing materials were identified.

March 15, 2019

## **6.0 SIGNATURE OF ASBESTOS INSPECTOR**

The IDEM Accredited Asbestos Inspector responsible for this report is noted as follows:



Daniel J. Stevens

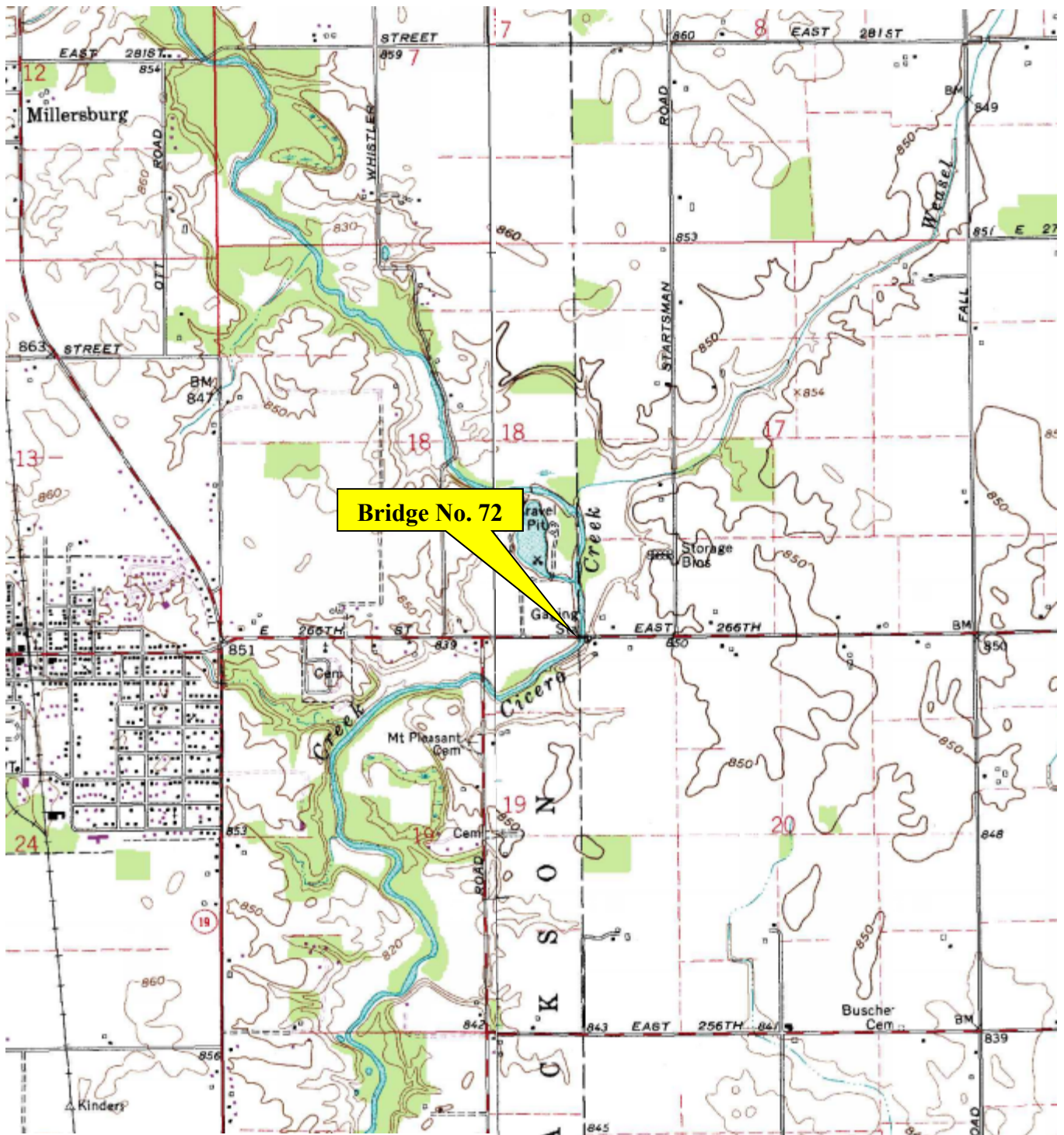
Asbestos Inspector, IDEM # 19A003455

## **APPENDIX 1**

### **FIGURE**



## Site Location Map



Omega and Arcadia, Indiana 7.5 Minute Quadrangle

Source - [http://gisdb.uits.indiana.edu/singlefile/map/IN24k\\_quad\\_index\\_1160\\_m10000.html](http://gisdb.uits.indiana.edu/singlefile/map/IN24k_quad_index_1160_m10000.html)

Map Compiled: 2/5/2019



**ASBESTOS INSPECTION REPORT**  
Hamilton County Bridge No. 72  
266<sup>th</sup> Street over Cicero Creek  
Hamilton County, Indiana

Scale: 1"=2000'

Figure: 1

## **APPENDIX 2**

### **LIMITATIONS**

## LIMITATIONS

The asbestos inspection included only the sampling and quantification of all visible suspect asbestos containing materials accessible from the top of the bridge and from the bank along and underneath the structure at the abutment walls.

The results of this inspection are based on the condition of the structures and the materials on the date on this inspection. Any change in these conditions may result in different recommendations.

# **APPENDIX D**

## Waters Report

## **WATERS OF THE U.S. REPORT**

Hamilton County Bridge No. 72  
266<sup>th</sup> Street over Cicero Creek  
Hamilton County, Indiana

**Prepared By:**



**DLZ Indiana, LLC  
157 E. Maryland Street  
Indianapolis, IN 46204**

**March 29, 2019**

## **WATERS OF THE U.S. REPORT**

Hamilton County Bridge No. 72  
266<sup>th</sup> Street over Cicero Creek  
Hamilton County, Indiana

Report By: Dan Stevens, Environmental Scientist, DLZ Indiana, LLC  
March 29, 2019

### **Introduction**

DLZ conducted a Waters of the United States determination on March 12, 2019 for the project involving the rehabilitation of Hamilton County Bridge No. 72 that carries 266<sup>th</sup> Street over Cicero Creek. The project also includes approach improvements to transition to and match the new bridge width. The project is located in Sections 17, 18, 19, 20 of Township 20 N, Range 5 E, Jackson Township, Hamilton County, Indiana. (**See Figure 1**). The project is within the Weasel Creek-Cicero Creek watershed with 12-digit Hydrologic Unit Code (HUC) of 0 051202010606.

The USGS Topographic Map of the USGS Omega Quadrangle Map shows Cicero Creek as a perennial blue-line drainage feature in the project area (**See Figure 2**). A Light Detection and Ranging (LiDAR) map of the project area is attached as **Figure 3**.

The National Wetlands Inventory (NWI) shows a PFO1C (Palustrine, Forested, Broad-Leaved Deciduous, Seasonally Flooded) wetland feature immediately south of the project site (**See Figure 4**). There is also a PFO1C feature located north and beyond the project limits. Additionally, the NWI shows Cicero Creek as a R2UBH (Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded) linear wetland feature. The current project is the replacement of the Bridge 72 that carries 266<sup>th</sup> Street over Cicero Creek.

According to the Soil Survey Geographic (SSURGO) Database for Hamilton County, Indiana, the following soil units are located in the project area (**See Figure 5**). CrA, MmB2, and Sh are listed as hydric soil units with 1-32% hydric components.

- Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes (CrA) – hydric (1-32%)
- Miami silt loam, 2 to 6 percent slopes, eroded (MmB2) – hydric (1-32%)
- Shoals silt loam, 0 to 2 percent slopes, frequently flooded, brief duration (Sh) – hydric (1-32%)

See Table 1 for a summary of the waters determination. See **Figures 1-7** for maps of the project area. See **Appendix A** for pictures.

### **Field Reconnaissance**

The project study limits contain existing roadway pavement, Cicero Creek, Bridge No 72, residential lawn, driveways, floodplain, and undeveloped land.

### Wetlands

No wetlands were identified in the project limits. Three representative sample points were studied for the presence of wetlands. The delineation procedures and wetland criteria outlined in the 1987 Corps of Engineers Wetland Delineation Manual were used for this study. In addition, the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0) was applied to the project area. Wetland Data sheets are attached (See **Appendix B**). Following are summaries of the sample points:

Sample point 1 was located in the riparian corridor and floodplain south of 266<sup>th</sup> Street and west of Cicero Creek. The dominant plants at this plot were silver maple (*Acer saccharinum*, FACW), red maple (*Acer rubrum*, FAC), eastern cottonwood (*Populus deltoides*, FAC), and Virginia wildrye (*Elymus virginicus*, FACW). These plants meet the hydrophytic plant criteria. Wetland hydrology was evidenced by the primary indicators of Sediment Deposits (B2) and Drift Deposits (B3) which are characteristic of a floodplain area. However, the soil was 10YR 3/2 silt loam from 0 to 20 inches which is not a hydric soil profile. It appears that while the site is frequently flooded, the soil has good internal drainage resulting in the lack of hydric soils. Since this plot does not meet the three wetland criteria, it is not considered a jurisdictional wetland.

Sample point 2 was located in the riparian corridor and floodplain north of 266<sup>th</sup> Street and west of Cicero Creek. The dominant plants at this plot were eastern cottonwood (*Populus deltoides*, FAC), red maple (*Acer rubrum*, FAC), sycamore (*Platanus occidentalis*, FACW), and Virginia wildrye (*Elymus virginicus*, FACW). These plants meet the hydrophytic plant criteria. Wetland hydrology was evidenced by the primary indicators of Sediment Deposits (B2) and Drift Deposits (B3) which are characteristic of a floodplain area. However, the soil was 10YR 3/2 silt loam from 0 to 20 inches which is not a hydric soil profile. It appears that while the site is frequently flooded, the soil has good internal drainage resulting in the lack of hydric soils. Since this plot does not meet the three wetland criteria, it is not considered a jurisdictional wetland.

Sample point 3 was located south of the west bridge approach roadway. The dominant plants at this plot were sycamore (*Platanus occidentalis*, FACW), eastern cottonwood (*Populus deltoides*, FAC), honeysuckle (*Lonicera tatarica*, FACU), Virginia wildrye (*Elymus virginicus*, FACW), tall goldenrod (*Solidago altissima*, FACU), and sedge (*Carex* sp., FACW). These plants meet the hydrophytic plant criteria. Wetland hydrology was evidenced by the primary indicator of Drift Deposits (B3) which are characteristic of a floodplain area. However, the soil was 10YR 3/2 silt loam from 0 to 20 inches which is not a hydric soil profile. It appears that while the site is frequently flooded, the soil has good internal drainage resulting in the lack of hydric soils. Since this plot does not meet the three wetland criteria, it is not considered a jurisdictional wetland.

### Cicero Creek

Cicero Creek is a perennial drainage feature. The estimated drainage area at the project site is approximately 130.8 square miles acres. Cicero Creek displays an OHWM. Approximately 14.4 miles downstream from the project site, Cicero Creek joins White River, a traditional navigable water. Cicero Creek is considered a Water of the U.S. because it connects to a traditional

navigable water and displays an OHWM. The maximum width at the OHWM is approximately 111 feet. The depth at the OHWM is approximately 5 feet. The substrate consists of silt, cobble and gravel. The stream quality of Cicero Creek is considered good since it provides in-channel habitat such as riffles and pools and has meanders. Areas of bank erosion are present. The OHWM of Cicero Creek was field flagged and is shown on **Figure 7**.

#### Roadside Ditches

No roadside ditches are present in the project limits. Concrete drainage turnouts are present in each quadrant of the bridge.

#### **Conclusions**

The USGS Topographic Map of the USGS Omega Quadrangle Map shows Cicero Creek as a perennial blue-line drainage feature in the project area. Field reconnaissance confirmed that Cicero Creek is a perennial drainage feature and displayed an OHWM. Cicero Creek connects to a traditional navigable water and is therefore considered a Water of the U.S. No suspected jurisdictional wetland areas were identified in the project limits.

Every effort should be taken to avoid and minimize impacts to the waterways. If impacts are necessary, then mitigation may be required. The final determination of jurisdictional waters is ultimately made by the U.S. Army Corps of Engineers (Corps) and this report is our best judgment based on the guidelines set forth by the Corps.

**Table 1: Stream Summary**  
Hamilton County Bridge No. 72  
266<sup>th</sup> Street over Cicero Creek  
Hamilton County, Indiana

Stream Name	Photos	Lat (N)	Lon (W)	OHWM		USGS Blue line?	Stream type (Perennial, Intermittent, Ephemeral)	Substrate	Riffles Pools?	Quality	Likely Water of U.S.?
				Maximum Width (feet)	Maximum Depth (feet)						
Cicero Creek	2, 3, 5, 6, 12, 13, 14, 15, 16, 17	40.176187°	-85.995695°	111	5	Yes	Perennial	cobble/ gravel/silt	Yes	Good	<b>Yes</b>



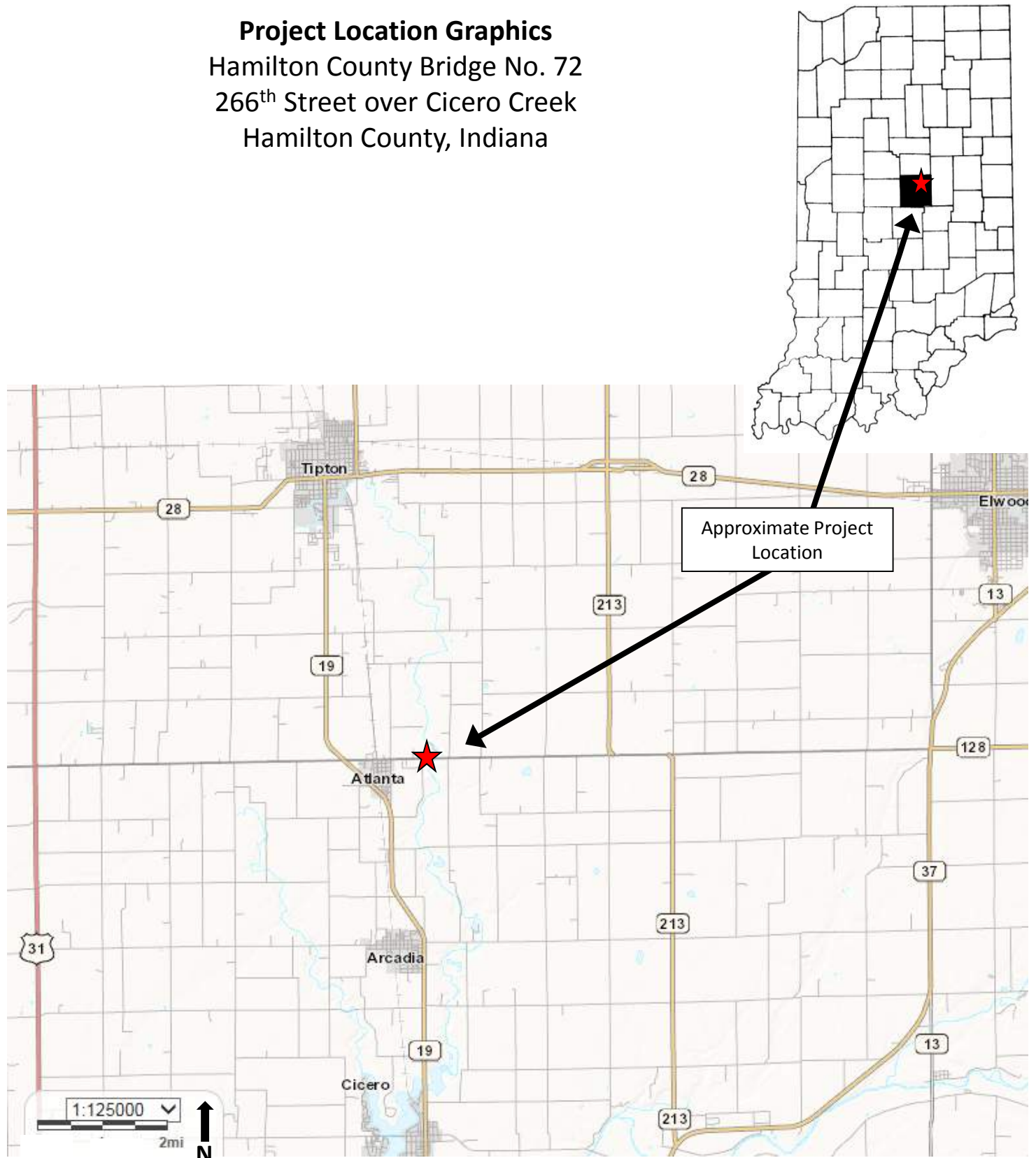
**Acknowledgement:**

This waters determination has been prepared based on the best available information interpreted in the light of the investigator's training, experience, and professional judgement in conformance with the *1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual (Technical Report Y-87-1)*, the *2010 U.S. Army Corps of Engineers Midwestern Regional Supplement*, the *USACE Jurisdictional Determination Form Instructional Guidebook*, and other appropriate agency guidelines.

A handwritten signature in blue ink, reading "Daniel J. Stevens", is positioned above a horizontal line.

Daniel J. Stevens  
Environmental Scientist  
DLZ Indiana, LLC

**Project Location Graphics**  
Hamilton County Bridge No. 72  
266<sup>th</sup> Street over Cicero Creek  
Hamilton County, Indiana



Source - <http://maps.indiana.edu/>

Map Compiled: 2/6/2019

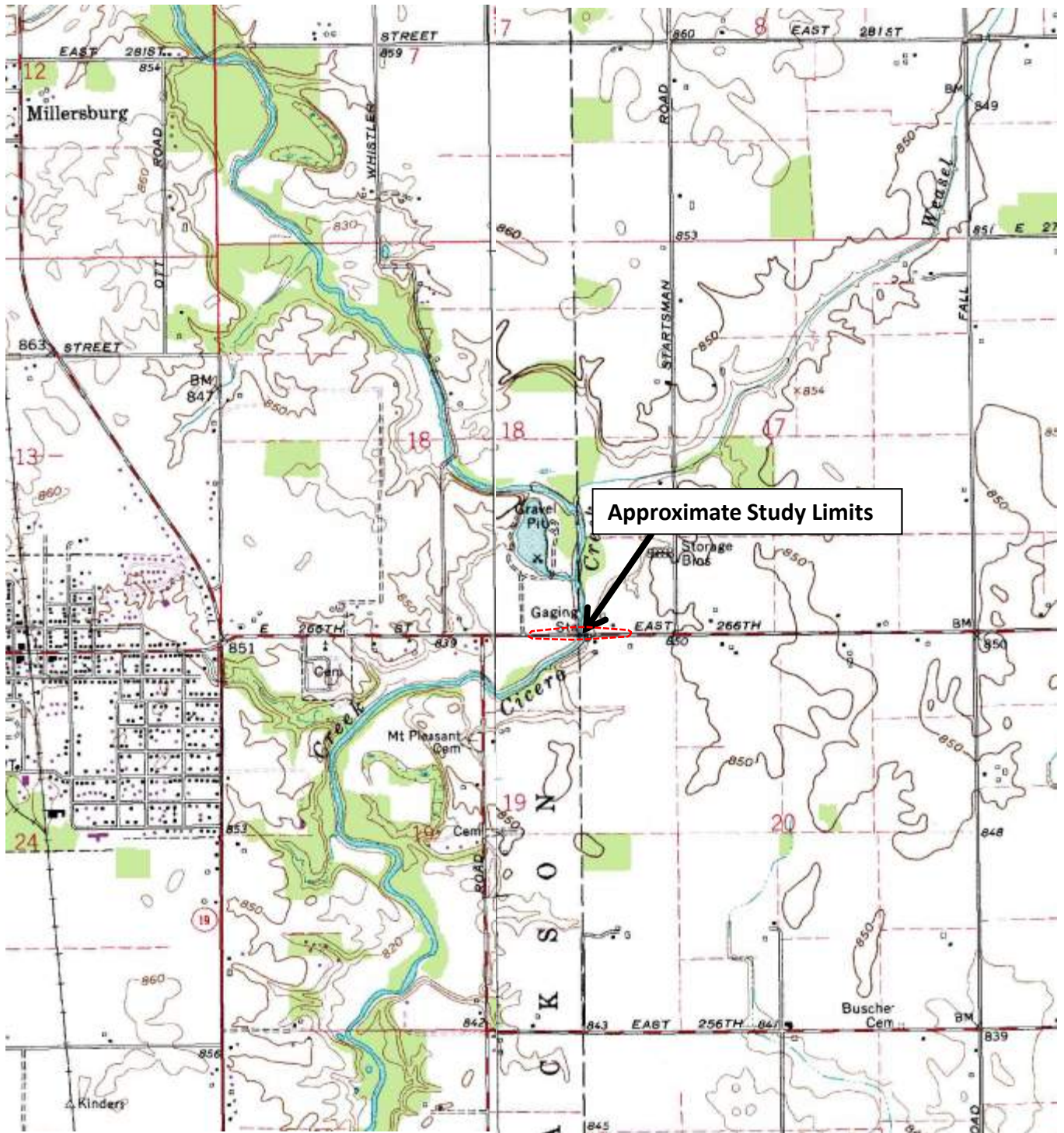


**WATERS OF THE U.S. REPORT**  
Hamilton County Bridge No. 72  
266<sup>th</sup> Street over Cicero Creek  
Hamilton County, Indiana

Scale:  
See Map

Figure: 1

## USGS Quadrangle Map



Omega and Arcadia, Indiana 7.5 Minute Quadrangle

Source - [http://gisdb.uits.indiana.edu/singlefile/map/IN24k\\_quad\\_index\\_1160\\_m10000.html](http://gisdb.uits.indiana.edu/singlefile/map/IN24k_quad_index_1160_m10000.html)

Map Compiled: 2/5/2019

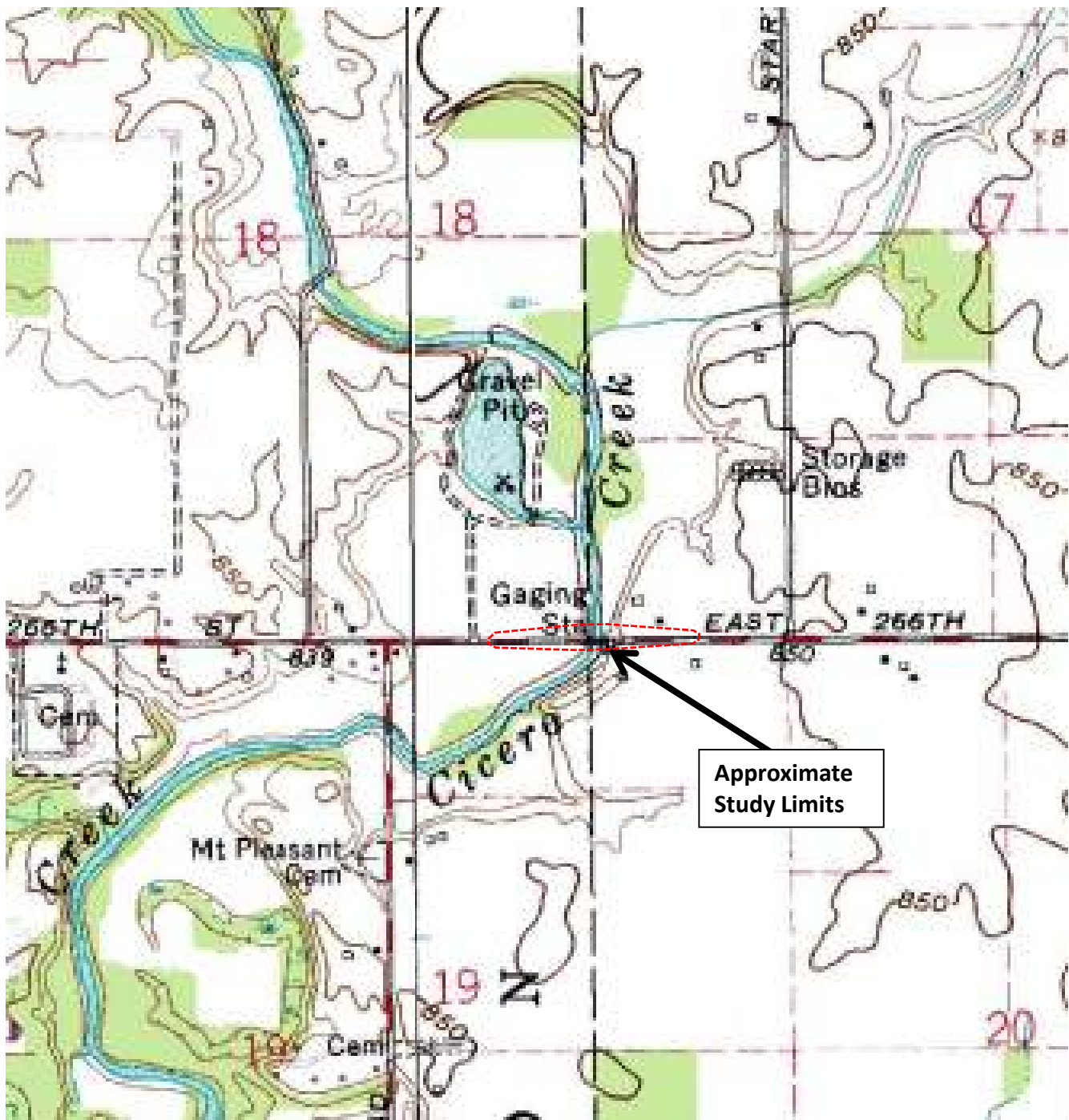


**WATERS OF THE U.S. REPORT**  
Hamilton County Bridge No. 72  
266<sup>th</sup> Street over Cicero Creek  
Hamilton County, Indiana

Scale: 1"=2000'

Figure: 2-1

## USGS Quadrangle Map



Omega and Arcadia, Indiana 7.5 Minute Quadrangle

Source - [http://gisdb.uits.indiana.edu/singlefile/map/IN24k\\_quad\\_index\\_1160\\_m10000.html](http://gisdb.uits.indiana.edu/singlefile/map/IN24k_quad_index_1160_m10000.html)

Map Compiled: 2/5/2019



**WATERS OF THE U.S. REPORT**  
Hamilton County Bridge No. 72  
266<sup>th</sup> Street over Cicero Creek  
Hamilton County, Indiana

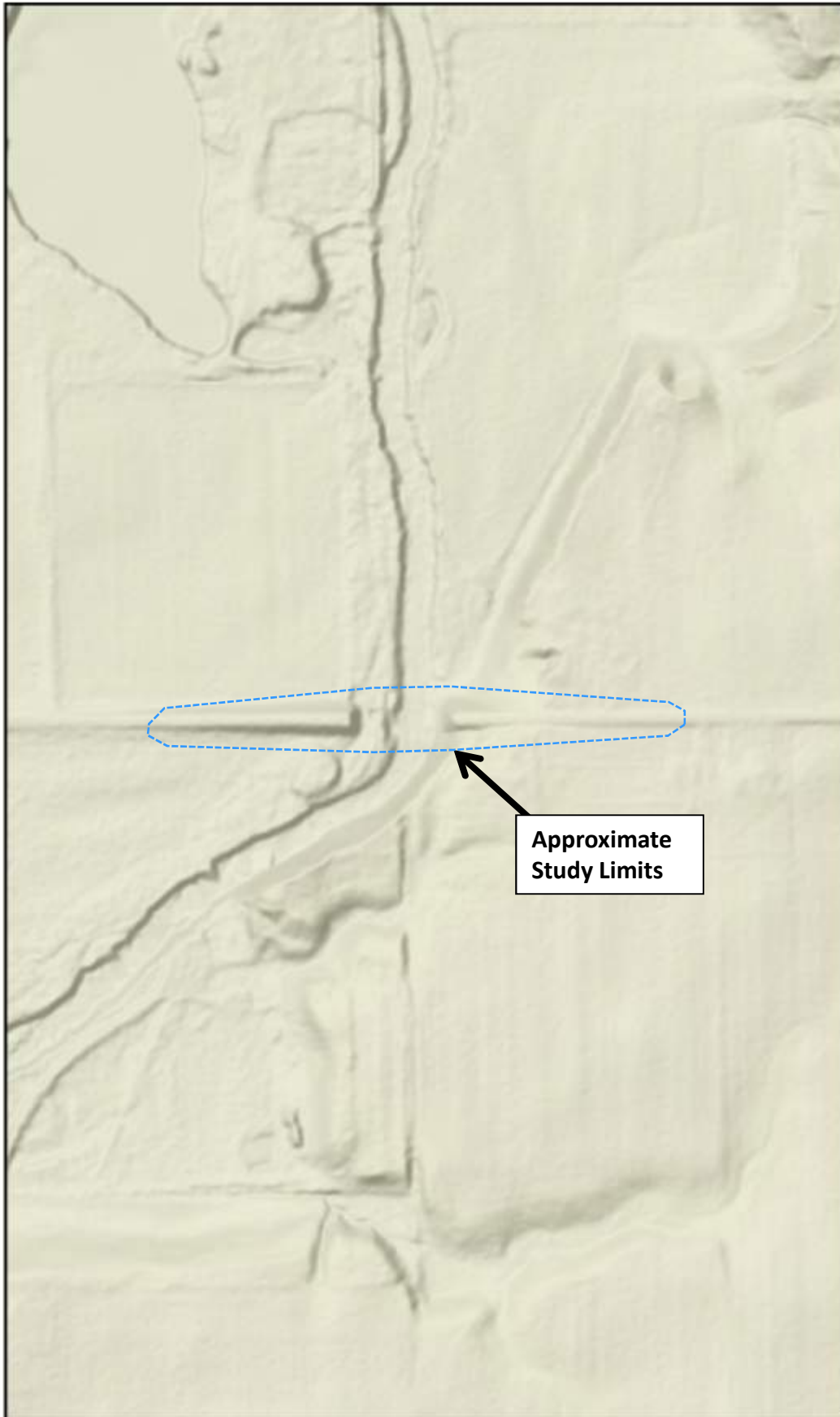
Scale: 1"=1000'

Figure: 2-2



# LIDAR Map

Date: 2/6/2019



## Legend



NORTH

Author:



IndianaMAP

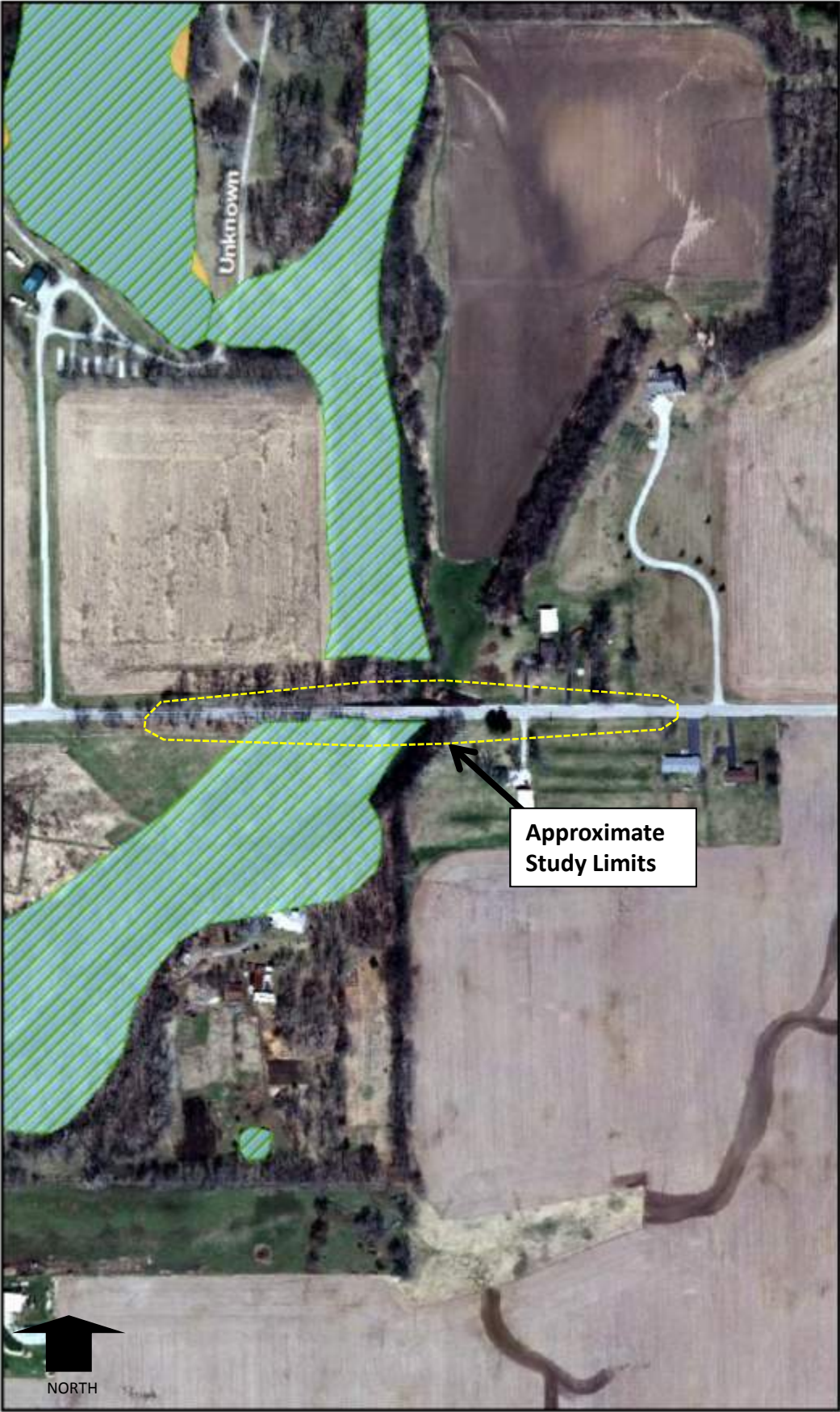
Figure: 3-1

# NWI Map

Date: 2/6/2019

## Legend

- Wetlands NWI (USFWS)
- Wetlands Project Metadata NWI
- Historic Wetlands NWI (USFWS)



Author:

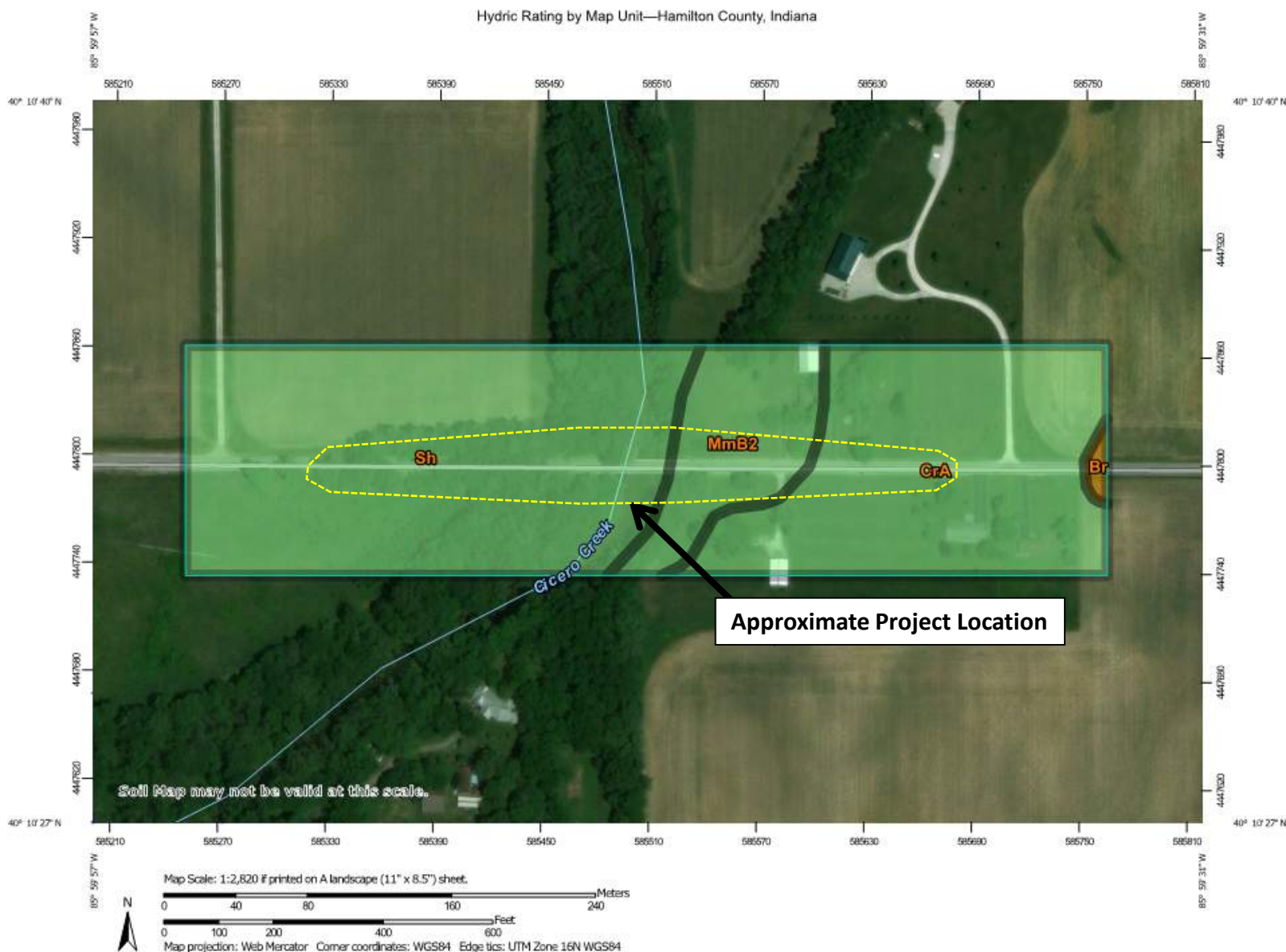
0 0.08 mi



Figure: 4-1

# Soil Survey

Hydric Rating by Map Unit—Hamilton County, Indiana



USDA  
Natural Resources  
Conservation Service

Web Soil Survey  
National Cooperative Soil Survey

2/6/2019  
Page 1 of 5

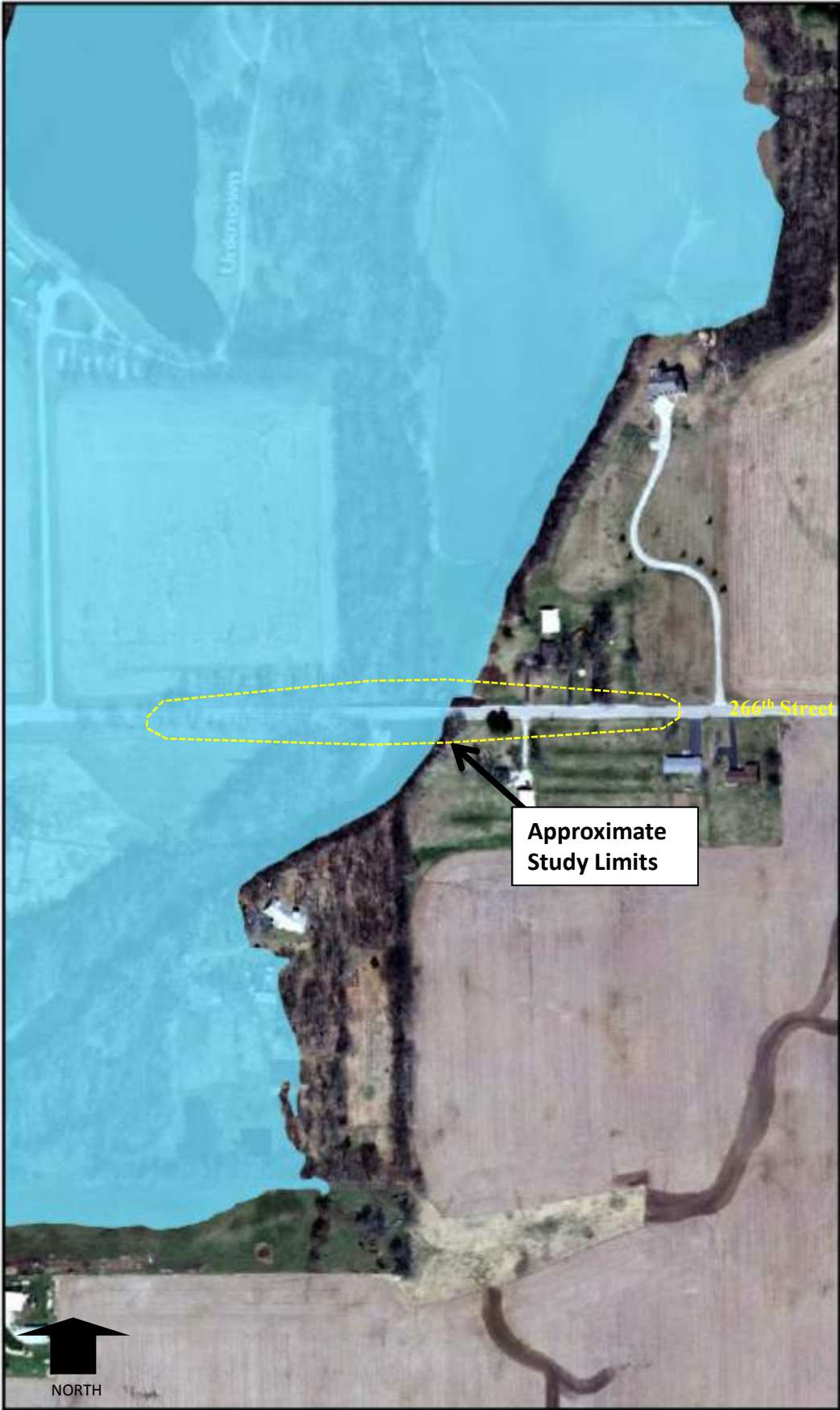
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Br	Brookston silty clay loam, 0 to 2 percent slopes	95	0.1	0.6%
CrA	Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes	2	5.7	35.0%
MmB2	Miami silt loam, 2 to 6 percent slopes, eroded	5	2.0	12.3%
Sh	Shoals silt loam, 0 to 2 percent slopes, frequently flooded, brief duration	4	8.5	52.1%
<b>Totals for Area of Interest</b>			<b>16.3</b>	<b>100.0%</b>

Figure: 5-1



# Floodplain Map

Date: 2/6/2019



## Legend

- Floodplains - FIRM (Aug 2018)**
- Floodway
  - 1% Annual Chance Flood Hazard
  - 0.2% Annual Chance, Protected
  - 0.2% Annual Chance Flood Hazard



NORTH

Author:

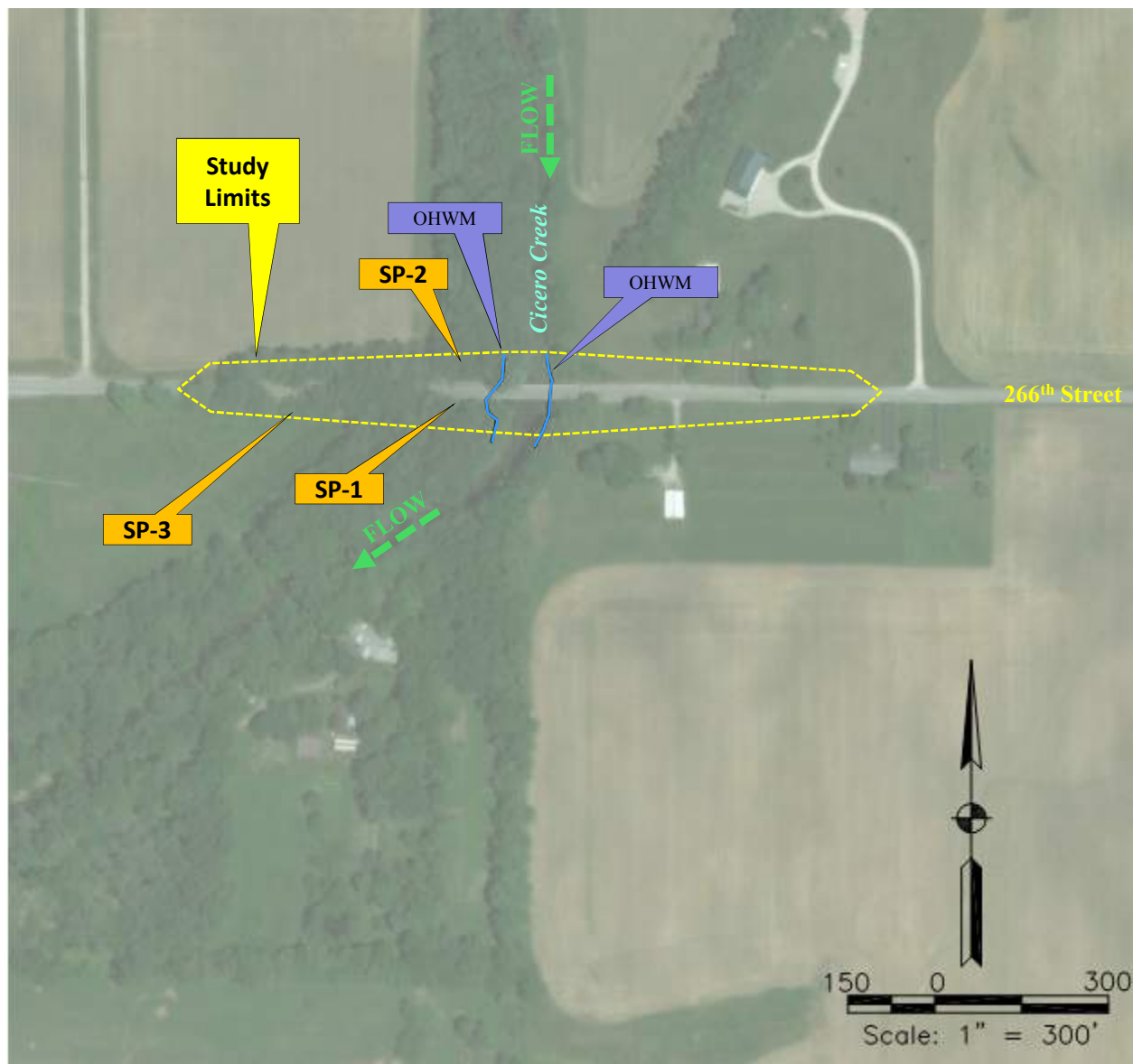
0 0.08 mi

IndianaMAP

Figure: 6




# Site Map - Overall

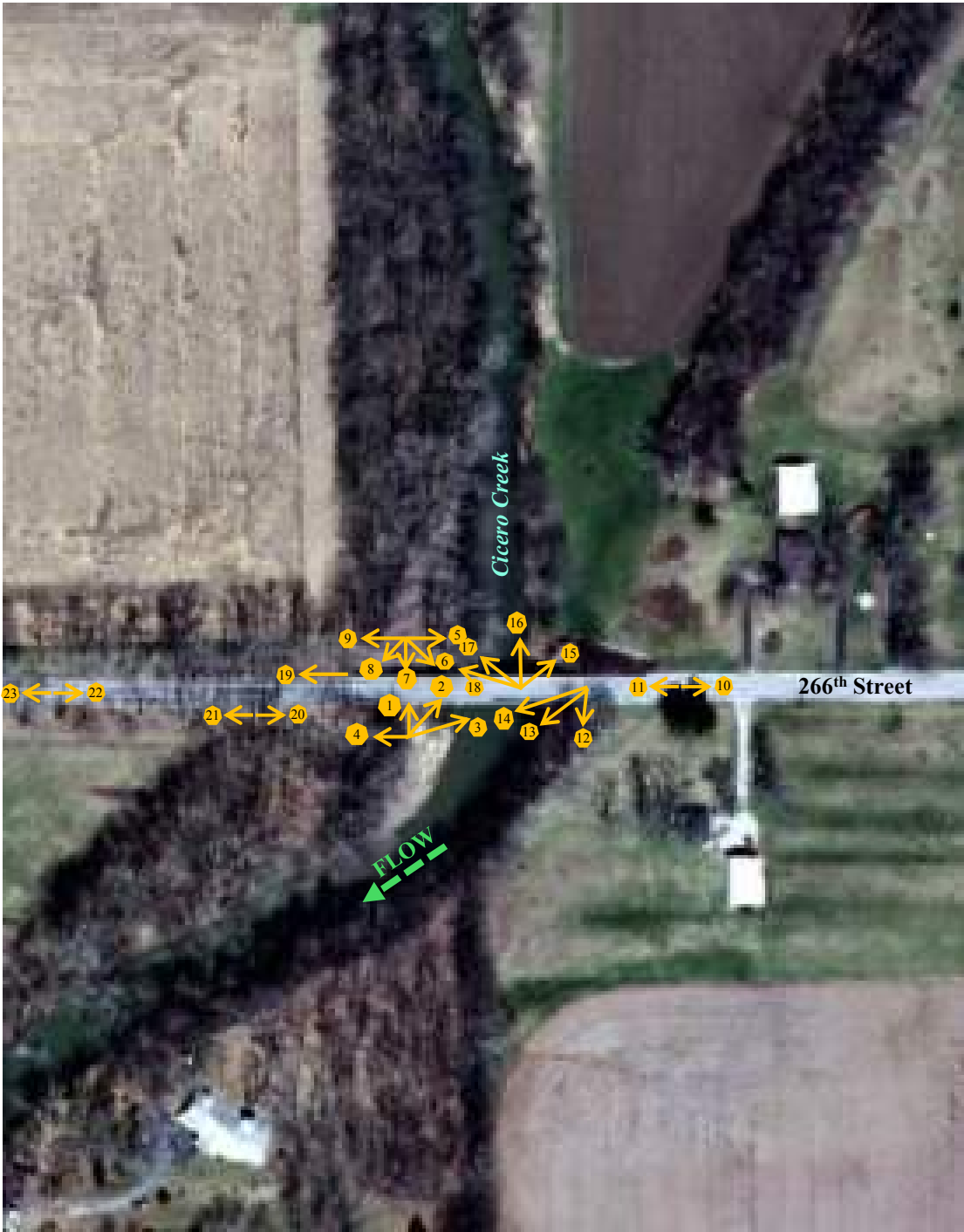


Map Compiled: 3/28/2019

- OHWM
- SP-1 Sample Point

	<b>WATERS OF THE U.S. REPORT</b> Hamilton County Bridge No. 72 266 <sup>th</sup> Street over Cicero Creek Hamilton County, Indiana	Scale: See Map
		Figure: 7-1

Photolog



Map Compiled: 3/13/2019

Photo Location

	<b>WATERS OF THE U.S. REPORT</b> Hamilton County Bridge No. 72 266 <sup>th</sup> Street over Cicero Creek Hamilton County, Indiana	Scale: See Map
		Appendix A-1



Photo 1: View north under Bridge 72



Photo 2: View northeast under Bridge 72



Photo 3: View east-northeast along Bridge 72



Photo 4: View west along west approach



**WATERS OF THE U.S. REPORT**  
Hamilton County Bridge No. 72  
266<sup>th</sup> Street over Cicero Creek  
Hamilton County, Indiana

Scale: NTS

Appendix A-2





Photo 5: View east along Bridge 72



Photo 6: View southeast under Bridge 72



Photo 7: View south under Bridge 72



Photo 8: View of bridge abutment



**WATERS OF THE U.S. REPORT**  
Hamilton County Bridge No. 72  
266<sup>th</sup> Street over Cicero Creek  
Hamilton County, Indiana

Scale: NTS

Appendix A-3





Photo 9: View west along west approach



Photo 10: View east toward east project limit



Photo 11: View west across Bridge 72



Photo 12: View south along east creek bank



**WATERS OF THE U.S. REPORT**  
Hamilton County Bridge No. 72  
266<sup>th</sup> Street over Cicero Creek  
Hamilton County, Indiana

Scale: NTS

Appendix A-4





Photo 13: View downstream (southwest)



Photo 14: View looking west-southwest from bridge



Photo 15: View looking northeast toward east bank



Photo 16: View upstream (north)



**WATERS OF THE U.S. REPORT**  
 Hamilton County Bridge No. 72  
 266<sup>th</sup> Street over Cicero Creek  
 Hamilton County, Indiana

Scale: NTS

Appendix A-5





Photo 17: View looking northwest from bridge



Photo 18: View looking west-northwest from bridge



Photo 19: View looking west along the north side of the road



Photo 20: View looking east along the south side of the road toward the bridge



**WATERS OF THE U.S. REPORT**  
Hamilton County Bridge No. 72  
266<sup>th</sup> Street over Cicero Creek  
Hamilton County, Indiana

Scale: NTS

Appendix A-6





Photo 21: View looking west along the south side of the road away from the bridge



Photo 22: View looking east toward the bridge



Photo 23: View looking west toward the west project limit



**WATERS OF THE U.S. REPORT**  
Hamilton County Bridge No. 72  
266<sup>th</sup> Street over Cicero Creek  
Hamilton County, Indiana

Scale: NTS

Appendix A-7





Photo 24: View of Sample Point 1



Photo 25: View of Sample Point 2



Photo 26: View of Sample Point 3



**WATERS OF THE U.S. REPORT**  
 Hamilton County Bridge No. 72  
 266<sup>th</sup> Street over Cicero Creek  
 Hamilton County, Indiana

Scale: NTS

Appendix A-8

# WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Hamilton Co. Bridge 72 City/County: Hamilton County Sampling Date: 3/12/2019  
 Applicant/Owner: Hamilton County State: Indiana Sampling Point: 1 - Upland  
 Investigator(s): Dan Stevens Section, Township, Range: S19, T20N, R5E  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none  
 Slope (%): \_\_\_\_\_ Lat: 40.176118° Long: 85.996197° Datum: \_\_\_\_\_  
 Soil Map Unit Name Sh (Shoals silt loam, 0-2% slopes, freq. flood, brief duration) NWI Classification: PFO1C

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation \_\_\_\_\_, soil \_\_\_\_\_, or hydrology \_\_\_\_\_ significantly disturbed?

Are "normal circumstances"

Are vegetation \_\_\_\_\_, soil \_\_\_\_\_, or hydrology \_\_\_\_\_ naturally problematic?

present? Yes

## SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: _____
Hydric soil present? <u>N</u>	
Wetland hydrology present? <u>Y</u>	

Remarks: (Explain alternative procedures here or in a separate report.)

The sample point does not meet the three wetland criteria and is not considered a jurisdictional wetland.

## VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species	Indicator Status	<b>Dominance Test Worksheet</b> Number of Dominant Species that are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across all Strata: <u>5</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)
1 <u>Acer saccharinum</u>	<u>40</u>	<u>Y</u>	<u>FACW</u>	
2 <u>Acer rubrum</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	
3 <u>Populus deltoides</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>80</u> = Total Cover				
Sapling/Shrub stratum (Plot size: <u>15'</u> )	Absolute % Cover	Dominant Species	Indicator Status	<b>Prevalence Index Worksheet</b> Total % Cover of: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>70</u> x 2 = <u>140</u> FAC species <u>60</u> x 3 = <u>180</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column totals <u>130</u> (A) <u>320</u> (B) Prevalence Index = B/A = <u>2.46</u>
1 <u>Acer rubrum</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	
2 _____	_____	_____	_____	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>20</u> = Total Cover				
Herb stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b> _____ Rapid test for hydrophytic vegetation <input checked="" type="checkbox"/> Dominance test is >50% <input checked="" type="checkbox"/> Prevalence index is ≤3.0* _____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) _____ Problematic hydrophytic vegetation* (explain) _____ *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
1 <u>Elymus virginicus</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	
2 _____	_____	_____	_____	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
6 _____	_____	_____	_____	
7 _____	_____	_____	_____	
8 _____	_____	_____	_____	
9 _____	_____	_____	_____	
10 _____	_____	_____	_____	
<u>30</u> = Total Cover				
Woody vine stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species	Indicator Status	<b>Hydrophytic vegetation present?</b> <u>Y</u>
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
<u>0</u> = Total Cover				

Remarks: (Include photo numbers here or on a separate sheet)

Hydrophytic vegetation was observed.

## SOIL

Sampling Point: 1 - Upland

## Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-20	10YR 3/2	-					silt loam	

\*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. \*\*Location: PL = Pore Lining, M = Matrix

## Hydric Soil Indicators:

- |  |   |
|--|---|
| <input type="checkbox"/> Histisol (A1)                     | <input type="checkbox"/> Sandy Gleyed Matrix (S4)   |
| <input type="checkbox"/> Histic Epipedon (A2)              | <input type="checkbox"/> Sandy Redox (S5)           |
| <input type="checkbox"/> Black Histic (A3)                 | <input type="checkbox"/> Stripped Matrix (S6)       |
| <input type="checkbox"/> Hydrogen Sulfide (A4)             | <input type="checkbox"/> Loamy Mucky Mineral (F1)   |
| <input type="checkbox"/> Stratified Layers (A5)            | <input type="checkbox"/> Loamy Gleyed Matrix (F2)   |
| <input type="checkbox"/> 2 cm Muck (A10)                   | <input type="checkbox"/> Depleted Matrix (F3)       |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6)    |
| <input type="checkbox"/> Thick Dark Surface (A12)          | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)          | <input type="checkbox"/> Redox Depressions (F8)     |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)      |   |

## Indicators for Problematic Hydric Soils:

- |   |
|---|
| <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)    |
| <input type="checkbox"/> Dark Surface (S7) (LRR K, L)               |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)  |
| <input type="checkbox"/> Very Shallow Dark Surface (TF12)           |
| <input type="checkbox"/> Other (explain in remarks)                 |

\*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

## Restrictive Layer (if observed):

 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_
Hydric soil present?   N  

## Remarks:

Hydric soils were not observed. Site frequently floods but apparently has good internal drainage.

## HYDROLOGY

## Wetland Hydrology Indicators:

## Primary Indicators (minimum of one is required; check all that apply)

- |  |   |
|--|---|
| <input type="checkbox"/> Surface Water (A1)                        | <input type="checkbox"/> Aquatic Fauna (B13)                        |
| <input type="checkbox"/> High Water Table (A2)                     | <input type="checkbox"/> True Aquatic Plants (B14)                  |
| <input type="checkbox"/> Saturation (A3)                           | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                 |
| <input type="checkbox"/> Water Marks (B1)                          | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) |
| <input checked="" type="checkbox"/> Sediment Deposits (B2)         | <input type="checkbox"/> Presence of Reduced Iron (C4)              |
| <input checked="" type="checkbox"/> Drift Deposits (B3)            | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Algal Mat or Crust (B4)                   | <input type="checkbox"/> Thin Muck Surface (C7)                     |
| <input type="checkbox"/> Iron Deposits (B5)                        | <input type="checkbox"/> Gauge or Well Data (D9)                    |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks)                 |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |
| <input type="checkbox"/> Water-Stained Leaves (B9)                 |   |

## Secondary Indicators (minimum of two required)

- |  |
|--|
| <input type="checkbox"/> Surface Soil Cracks (B6)                  |
| <input checked="" type="checkbox"/> Drainage Patterns (B10)        |
| <input type="checkbox"/> Dry-Season Water Table (C2)               |
| <input type="checkbox"/> Crayfish Burrows (C8)                     |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Stunted or Stressed Plants (D1)           |
| <input type="checkbox"/> Geomorphic Position (D2)                  |
| <input type="checkbox"/> FAC-Neutral Test (D5)                     |

## Field Observations:

Surface water present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):	<u>  0  </u>
Water table present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):	<u>  0  </u>
Saturation present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):	<u>  0  </u>

 (includes capillary fringe)
Wetland hydrology present?   Y  

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

## Remarks:

Wetland hydrology was observed through primary indicators. The site frequently floods, however, it appears to have good internal soil drainage.

# WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Hamilton Co. Bridge 72 City/County: Hamilton County Sampling Date: 3/12/2019  
 Applicant/Owner: Hamilton County State: Indiana Sampling Point: 2 - Upland  
 Investigator(s): Dan Stevens Section, Township, Range: S18, T20N, R5E  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none  
 Slope (%): \_\_\_\_\_ Lat: 40.176307° Long: 85.996179° Datum: \_\_\_\_\_  
 Soil Map Unit Name Sh (Shoals silt loam, 0-2% slopes, freq. flood, brief duration) NWI Classification: none

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation \_\_\_\_\_, soil \_\_\_\_\_, or hydrology \_\_\_\_\_ significantly disturbed?

Are "normal circumstances"

Are vegetation \_\_\_\_\_, soil \_\_\_\_\_, or hydrology \_\_\_\_\_ naturally problematic?

present? Yes

## SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: _____
Hydric soil present? <u>N</u>	
Wetland hydrology present? <u>Y</u>	

Remarks: (Explain alternative procedures here or in a separate report.)

The sample point does not meet the three wetland criteria and is not considered a jurisdictional wetland.

## VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species	Indicator Status	<b>Dominance Test Worksheet</b> Number of Dominant Species that are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across all Strata: <u>4</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)
1 <u>Populus deltoides</u>	<u>50</u>	<u>Y</u>	<u>FAC</u>	
2 <u>Acer rubrum</u>	<u>50</u>	<u>Y</u>	<u>FAC</u>	
3 <u>Platanus occidentalis</u>	<u>20</u>	<u>N</u>	<u>FACW</u>	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>120</u> = Total Cover				
Sapling/Shrub stratum (Plot size: <u>15'</u> )	Absolute % Cover	Dominant Species	Indicator Status	<b>Prevalence Index Worksheet</b> Total % Cover of: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>30</u> x 2 = <u>60</u> FAC species <u>120</u> x 3 = <u>360</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column totals <u>150</u> (A) <u>420</u> (B) Prevalence Index = B/A = <u>2.80</u>
1 <u>Acer rubrum</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	
2 _____	_____	_____	_____	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>20</u> = Total Cover				
Herb stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b> _____ Rapid test for hydrophytic vegetation <input checked="" type="checkbox"/> Dominance test is >50% <input checked="" type="checkbox"/> Prevalence index is ≤3.0* _____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) _____ Problematic hydrophytic vegetation* (explain) _____ *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
1 <u>Elymus virginicus</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>	
2 _____	_____	_____	_____	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
6 _____	_____	_____	_____	
7 _____	_____	_____	_____	
8 _____	_____	_____	_____	
9 _____	_____	_____	_____	
10 _____	_____	_____	_____	
<u>10</u> = Total Cover				
Woody vine stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species	Indicator Status	<b>Hydrophytic vegetation present?</b> <u>Y</u>
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
<u>0</u> = Total Cover				

Remarks: (Include photo numbers here or on a separate sheet)

Hydrophytic vegetation was observed.

# SOIL

Sampling Point: 2 - Upland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-20	10YR 3/2	-					silt loam	

\*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. \*\*Location: PL = Pore Lining, M = Matrix

## Hydric Soil Indicators:

- |  |   |
|--|---|
| <input type="checkbox"/> Histisol (A1)                     | <input type="checkbox"/> Sandy Gleyed Matrix (S4)   |
| <input type="checkbox"/> Histic Epipedon (A2)              | <input type="checkbox"/> Sandy Redox (S5)           |
| <input type="checkbox"/> Black Histic (A3)                 | <input type="checkbox"/> Stripped Matrix (S6)       |
| <input type="checkbox"/> Hydrogen Sulfide (A4)             | <input type="checkbox"/> Loamy Mucky Mineral (F1)   |
| <input type="checkbox"/> Stratified Layers (A5)            | <input type="checkbox"/> Loamy Gleyed Matrix (F2)   |
| <input type="checkbox"/> 2 cm Muck (A10)                   | <input type="checkbox"/> Depleted Matrix (F3)       |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6)    |
| <input type="checkbox"/> Thick Dark Surface (A12)          | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)          | <input type="checkbox"/> Redox Depressions (F8)     |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)      |   |

## Indicators for Problematic Hydric Soils:

- |   |
|---|
| <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)    |
| <input type="checkbox"/> Dark Surface (S7) (LRR K, L)               |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)  |
| <input type="checkbox"/> Very Shallow Dark Surface (TF12)           |
| <input type="checkbox"/> Other (explain in remarks)                 |

\*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

## Restrictive Layer (if observed):

Type: \_\_\_\_\_  
Depth (inches): \_\_\_\_\_

Hydric soil present?   N  

Remarks:

Hydric soils were not observed. Site frequently floods but apparently has good internal drainage.

# HYDROLOGY

## Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- |  |   |
|--|---|
| <input type="checkbox"/> Surface Water (A1)                        | <input type="checkbox"/> Aquatic Fauna (B13)                        |
| <input type="checkbox"/> High Water Table (A2)                     | <input type="checkbox"/> True Aquatic Plants (B14)                  |
| <input type="checkbox"/> Saturation (A3)                           | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                 |
| <input type="checkbox"/> Water Marks (B1)                          | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) |
| <input checked="" type="checkbox"/> Sediment Deposits (B2)         | <input type="checkbox"/> Presence of Reduced Iron (C4)              |
| <input checked="" type="checkbox"/> Drift Deposits (B3)            | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Algal Mat or Crust (B4)                   | <input type="checkbox"/> Thin Muck Surface (C7)                     |
| <input type="checkbox"/> Iron Deposits (B5)                        | <input type="checkbox"/> Gauge or Well Data (D9)                    |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks)                 |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |   |
| <input type="checkbox"/> Water-Stained Leaves (B9)                 |   |

Secondary Indicators (minimum of two required)

- |  |
|--|
| <input type="checkbox"/> Surface Soil Cracks (B6)                  |
| <input checked="" type="checkbox"/> Drainage Patterns (B10)        |
| <input type="checkbox"/> Dry-Season Water Table (C2)               |
| <input type="checkbox"/> Crayfish Burrows (C8)                     |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Stunted or Stressed Plants (D1)           |
| <input type="checkbox"/> Geomorphic Position (D2)                  |
| <input type="checkbox"/> FAC-Neutral Test (D5)                     |

## Field Observations:

Surface water present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):	<u>  0  </u>
Water table present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):	<u>  0  </u>
Saturation present? (includes capillary fringe)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):	<u>  0  </u>

Wetland hydrology present?   Y  

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology was observed through primary indicators. The site frequently floods, however, it appears to have good internal soil drainage.

# WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Hamilton Co. Bridge 72 City/County: Hamilton County Sampling Date: 3/19/2019  
 Applicant/Owner: Hamilton County State: Indiana Sampling Point: 3 - Upland  
 Investigator(s): Dan Stevens Section, Township, Range: S19, T20N, R5E  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none  
 Slope (%): \_\_\_\_\_ Lat: 40.176063° Long: 85.997575° Datum: \_\_\_\_\_  
 Soil Map Unit Name Sh (Shoals silt loam, 0-2% slopes, freq. flood, brief duration) NWI Classification: PFO1C

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation \_\_\_\_\_, soil \_\_\_\_\_, or hydrology \_\_\_\_\_ significantly disturbed?

Are "normal circumstances"

Are vegetation \_\_\_\_\_, soil \_\_\_\_\_, or hydrology \_\_\_\_\_ naturally problematic?

present? Yes

## SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present? <u>Y</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: _____
Hydric soil present? <u>N</u>	
Wetland hydrology present? <u>Y</u>	

Remarks: (Explain alternative procedures here or in a separate report.)

The sample point does not meet the three wetland criteria and is not considered a jurisdictional wetland.

## VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species	Indicator Status	<b>Dominance Test Worksheet</b> Number of Dominant Species that are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across all Strata: <u>6</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>66.67%</u> (A/B)
1 <u>Populus deltoides</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	
2 <u>Platanus occidentalis</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>40</u> = Total Cover				
Sapling/Shrub stratum (Plot size: <u>15'</u> )	Absolute % Cover	Dominant Species	Indicator Status	<b>Prevalence Index Worksheet</b> Total % Cover of: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>70</u> x 2 = <u>140</u> FAC species <u>20</u> x 3 = <u>60</u> FACU species <u>65</u> x 4 = <u>260</u> UPL species <u>0</u> x 5 = <u>0</u> Column totals <u>155</u> (A) <u>460</u> (B) Prevalence Index = B/A = <u>2.97</u>
1 <u>Lonicera tatarica</u>	<u>40</u>	<u>Y</u>	<u>FACU</u>	
2 _____	_____	_____	_____	
3 _____	_____	_____	_____	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
<u>40</u> = Total Cover				
Herb stratum (Plot size: <u>5'</u> )	Absolute % Cover	Dominant Species	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b> _____ Rapid test for hydrophytic vegetation <input checked="" type="checkbox"/> Dominance test is >50% <input checked="" type="checkbox"/> Prevalence index is ≤3.0* _____ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) _____ Problematic hydrophytic vegetation* (explain) _____ *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
1 <u>Elymus virginicus</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	
2 <u>Solidago altissima</u>	<u>25</u>	<u>Y</u>	<u>FACU</u>	
3 <u>Carex sp.</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
6 _____	_____	_____	_____	
7 _____	_____	_____	_____	
8 _____	_____	_____	_____	
9 _____	_____	_____	_____	
10 _____	_____	_____	_____	
<u>75</u> = Total Cover				
Woody vine stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species	Indicator Status	<b>Hydrophytic vegetation present?</b> <u>Y</u>
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
<u>0</u> = Total Cover				

Remarks: (Include photo numbers here or on a separate sheet)

Hydrophytic vegetation was observed.

## SOIL

Sampling Point: 3 - Upland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-20	10YR 3/2	100					silt loam	

\*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. \*\*Location: PL = Pore Lining, M = Matrix

**Hydric Soil Indicators:**

- |  |   |
|--|---|
| <input type="checkbox"/> Histisol (A1)                     | <input type="checkbox"/> Sandy Gleyed Matrix (S4)   |
| <input type="checkbox"/> Histic Epipedon (A2)              | <input type="checkbox"/> Sandy Redox (S5)           |
| <input type="checkbox"/> Black Histic (A3)                 | <input type="checkbox"/> Stripped Matrix (S6)       |
| <input type="checkbox"/> Hydrogen Sulfide (A4)             | <input type="checkbox"/> Loamy Mucky Mineral (F1)   |
| <input type="checkbox"/> Stratified Layers (A5)            | <input type="checkbox"/> Loamy Gleyed Matrix (F2)   |
| <input type="checkbox"/> 2 cm Muck (A10)                   | <input type="checkbox"/> Depleted Matrix (F3)       |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6)    |
| <input type="checkbox"/> Thick Dark Surface (A12)          | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)          | <input type="checkbox"/> Redox Depressions (F8)     |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)      |   |

**Indicators for Problematic Hydric Soils:**

- |   |
|---|
| <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)    |
| <input type="checkbox"/> Dark Surface (S7) (LRR K, L)               |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)  |
| <input type="checkbox"/> Very Shallow Dark Surface (TF12)           |
| <input type="checkbox"/> Other (explain in remarks)                 |

\*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

**Restrictive Layer (if observed):**
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_
Hydric soil present?   N  

Remarks:

Hydric soils were not observed. Site frequently floods but apparently has good internal drainage.

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

- |  |
|--|
| <input type="checkbox"/> Surface Water (A1)                        |
| <input type="checkbox"/> High Water Table (A2)                     |
| <input type="checkbox"/> Saturation (A3)                           |
| <input type="checkbox"/> Water Marks (B1)                          |
| <input type="checkbox"/> Sediment Deposits (B2)                    |
| <input checked="" type="checkbox"/> Drift Deposits (B3)            |
| <input type="checkbox"/> Algal Mat or Crust (B4)                   |
| <input type="checkbox"/> Iron Deposits (B5)                        |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |
| <input type="checkbox"/> Water-Stained Leaves (B9)                 |

- |   |
|---|
| <input type="checkbox"/> Aquatic Fauna (B13)                        |
| <input type="checkbox"/> True Aquatic Plants (B14)                  |
| <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                 |
| <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) |
| <input type="checkbox"/> Presence of Reduced Iron (C4)              |
| <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Thin Muck Surface (C7)                     |
| <input type="checkbox"/> Gauge or Well Data (D9)                    |
| <input type="checkbox"/> Other (Explain in Remarks)                 |

Secondary Indicators (minimum of two required)

- |  |
|--|
| <input type="checkbox"/> Surface Soil Cracks (B6)                  |
| <input type="checkbox"/> Drainage Patterns (B10)                   |
| <input type="checkbox"/> Dry-Season Water Table (C2)               |
| <input type="checkbox"/> Crayfish Burrows (C8)                     |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Stunted or Stressed Plants (D1)           |
| <input type="checkbox"/> Geomorphic Position (D2)                  |
| <input type="checkbox"/> FAC-Neutral Test (D5)                     |

**Field Observations:**

Surface water present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): <u>  0  </u>
Water table present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): <u>  0  </u>
Saturation present? (includes capillary fringe)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): <u>  0  </u>

Wetland hydrology present?   Y  

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology was observed through primary indicators. The site frequently floods, however, it appears to have good internal soil drainage.

## **ATTACHMENT**

### **PRELIMINARY JURISDICTIONAL DETERMINATION FORM**

#### **BACKGROUND INFORMATION**

**A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD):** March 29, 2019

**B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:**

Daniel J. Stevens  
DLZ Indiana, LLC  
2211 E. Jefferson Blvd.  
South Bend, IN 46615  
Phone: 574-236-4400

**C. DISTRICT OFFICE, FILE NAME, AND NUMBER:**

**D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:  
(USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT  
DIFFERENT SITES)**

DLZ conducted a "Waters of the United States" determination on March 12, 2019 for the project involving the rehabilitation of Hamilton County Bridge No. 72 that carries 266<sup>th</sup> Street over Cicero Creek. The project also includes approach improvements to transition to and match the new bridge width. The project is located in Sections 17, 18, 19, 20 of Township 20 N, Range 5 E, Jackson Township, Hamilton County, Indiana.

State: Indiana County/parish/borough: Hamilton County City: n/a  
Center coordinates of site (lat/long in degree decimal format):  
Lat.: 40.066963°, Long.: -85.885623°  
Universal Transverse Mercator: 16T, 585507.18 m E, 4447796.05 m N  
Name of nearest waterbody: Cicero Creek

Identify (estimate) amount of waters in the review area:

Non-wetland waters: 150 linear feet: width 110 (ft) and/or 0.38 acres.  
Cowardin Class: Riverine  
Stream Flow: Perennial  
Wetlands: n/a  
Cowardin Class: n/a

Name of any water bodies on the site that have been identified as Section 10 waters:

Tidal: N/A  
Non-Tidal: N/A



**E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**

- ☐ Office (Desk) Determination. Date:
- ☐ Field Determination. Date(s):

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.


This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

**SUPPORTING DATA. Data reviewed for preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below):**

- X Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: DLZ Indiana, LLC.
- X Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - ☐ Office concurs with data sheets/delineation report.
  - ☐ Office does not concur with data sheets/delineation report.
- ☐ Data sheets prepared by the Corps: .
- ☐ Corps navigable waters' study: .
- ☐ U.S. Geological Survey Hydrologic Atlas: .
  - ☐ USGS NHD data.
  - ☐ USGS 8 and 12 digit HUC maps.
- X U.S. Geological Survey map(s). Cite scale & quad name: Omega, 1:24,000 scale
- X USDA Natural Resources Conservation Service Soil Survey. Citation: USDA Soil Survey of Hamilton County
- ☒ National wetlands inventory map(s). Cite name: Omega.
- ☐ State/Local wetland inventory map(s): .
- ☐ FEMA/FIRM maps: .
- ☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- X Photographs: X Aerial (Name & Date): 2018 IndianaMap.  
Or X Other (Name & Date): Site Photographs, 3/12/2019.
- ☐ Previous determination(s). File no. and date of response letter: .
- ☐ Other information (please specify): .

**IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.**

\_\_\_\_\_  
Signature and date of  
Regulatory Project Manager  
(REQUIRED)

  
\_\_\_\_\_  
Signature and date of  
person requesting preliminary JD  
(REQUIRED, unless obtaining  
the signature is impracticable)

<b>Site number</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Cowardin Class</b>	<b>Estimated amount of aquatic resource in review area</b>	<b>Class of aquatic resource</b>
Cicero Creek	40.176187°	-85.995695°	Riverine	0.38 acre	non-section 10 – non-wetland

# **APPENDIX E**

## Permits

# Hamilton County Crossing Permit



# Hamilton County Surveyor's Office

One Hamilton County Square, Suite 188

Noblesville, Indiana 46060

Office: (317) 776-8495 Fax: (317) 776-9628

## Crossing Permit

**Permit Number:** C-2020-00081    **Issue Date:** November 02, 2020    **Temporary:** N  
**Drain Name:** BIG CICERO CREEK    **Project Name:** Hamilton County Bridge #72 Rehab  
**Project Location:** East of SR 19 on 266th St. between Mt. Pleasant & Startsman Roads  
**Crossing Type:** Other    **# of Crossings:** 1    **Engineering Firm:** DLZ  
**Purpose:** Rehabilitation of bridge    **Plan Project Id:** N/A

### Applicant:

DLZ ENGINEERS  
36 S. PENNSYLVANIA ST.  
INDIANAPOLIS, IN

Contact: Henke, DLZ  
317-633-4120

### Conditions for Approval:

Call the Hamilton County Surveyor's Office at 317-776-8495 to schedule inspection.

### Parcels:

<b>Parcel No:</b> 03-03-18-00-00-013.000	Jackson
<b>Parcel No:</b> 07-03-20-00-00-001.000	White River
<b>Parcel No:</b> 03-03-19-00-00-017.001	Jackson
<b>Parcel No:</b> 07-03-17-00-00-015.000	White River

APPROVED

11/02/2020

Surveyor:

Date:

## Corps 404 Permit



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, LOUISVILLE DISTRICT**  
**INDIANAPOLIS REGULATORY OFFICE**  
**8902 OTIS AVENUE, SUITE S106B**  
**INDIANAPOLIS, IN 46216**

January 6, 2021

Regulatory Division  
North Branch  
ID No. LRL-2020-861-htm

Mr. Matt Lee  
Hamilton County Board of Commissioners  
1700 South 10th Street  
Noblesville, Indiana 46060

Dear Mr. Lee

This is in regards to your letter received October 13, 2020, from DLZ Indiana, LLC concerning the proposed discharge of fill material into 50 LF of Cicero Creek. The work would support the rehabilitation of Hamilton County Bridge No. 72 carrying 266th Street over Cicero Creek. The project is located at Latitude: 40.1761°N, Longitude: - 85.9956°W, Section 17, 18, 19 and 20, Township 20 North, Range 5 East, Arcadia, Hamilton County, Indiana. We have reviewed the submitted data relative to Section 404 of the Clean Water Act (CWA).

We have determined that the proposed project is authorized under the provisions of our Nationwide Permit (NWP) 33 CFR 330 (3) for Maintenance as published in the Federal Register on January 6, 2017. We do require compliance with the enclosed Terms and General Conditions of the NWP. Compliance is also required with the Section 401 Water Quality Certification issued by the Indiana Department of Environmental Management (IDEM) dated March 15, 2017.

The enclosed Compliance Certification must be submitted to the District Engineer within 30 days of completion of the authorized activity. This authorization is valid until March 18, 2022. If you have any questions concerning this matter, please contact me by writing to the above address or by calling (317) 543-9424. All correspondence pertaining to this matter should refer to our ID Number LRL-2020-861-htm.

Sincerely,

Howard T. Mills  
Physical Scientist (Regulatory)  
Indianapolis Regulatory Office

Copy Furnished: IDEM (Farren)  
DLZ Indiana, LLC (LaTurner)



**Compliance Certification**

**Permit Number:** LRL-2020-861-htm

**Name of Permittee:** Hamilton County Board of Commissioners

**Agent:** DLZ Indiana, LLC

**Date of Issuance:** January 6, 2021

Within 30 days of completion of the activity authorized by this permit and any mitigation required by this permit, sign this certification and return it to the following address:

USACE - Louisville District  
Indianapolis Regulatory Office  
8902 Otis Avenue, Suite S106B  
Indianapolis, IN 46216-1055

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

---

Signature for Permittee  
(Matt Lee)

---

Date



**US Army Corps  
of Engineers®**  
Louisville District

# 2017 Nationwide Permit General Conditions

The following General Conditions must be followed in order for any authorization by NWP to be valid:

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the US Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. (a) No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. The permittee shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>

17. Tribal Rights. No activity may impair tribal rights (including treaty rights), protected tribal resources, or tribal lands.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on the listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification (PCN) to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the PCN must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete PCN. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from Corps.

(d) As a result of formal or informal consultation with the USFWS or NMFS the district engineer may add species-specific permit conditions to the NWP.

(e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will review the ESA section 10(a)(1)(B) permit, and if he or she determines that it covers the proposed NWP activity, including any incidental take of listed species that might occur as a result of conducting the proposed NWP activity, the district engineer does not need to conduct a separate section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete PCN whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/pr/species/esa> respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those

requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause an effect on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, and adverse effect. Where the non-Federal applicant has identified historic properties on which the activity might have the potential to cause effects and notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed.

(d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the US are not authorized by NWP 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWP 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse environmental effects.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g. conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. Restored riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on the both sides of a stream or if the waterbody is a lake or coastal waters. Then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g. riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation if the use of mitigation bank or in-lieu fee program credits is not appropriate and practicable.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality

Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or USEPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

\_\_\_\_\_  
(Transferee)

\_\_\_\_\_  
(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the work and mitigation. The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally

authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires Section 408 permission is not authorized by the NWP until the appropriate Corps office issues the section 408 permission to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification (PCN). (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures. For single and complete linear projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other water for each single and complete crossing of those wetlands, other special aquatic sites, and other waters. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an

illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed activity or utilize the designated critical habitat that may be affected by the proposed activity. For any NWP activity that requires pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. Federal permittees must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and

(10) For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project.

(c) Form of PCN Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is an NWP PCN and must include all of the information required in paragraphs (b)(1) through (10) of this general condition. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require preconstruction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line or ordinary high water mark.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural

resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, sites specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of PCN notifications to expedite agency coordination.

#### Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

## Terms for Nationwide Permit No. 3

### Maintenance

(a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, requirements of other regulatory agencies, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. This NWP also authorizes the removal of previously authorized structures or fills. Any stream channel modification is limited to the minimum necessary for the repair, rehabilitation, or replacement of the structure or fill; such modifications, including the removal of material from the stream channel, must be immediately adjacent to the project. This NWP also authorizes the removal of accumulated sediment and debris within, and in the immediate vicinity of, the structure or fill. This NWP also authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

(b) This NWP also authorizes the removal of accumulated sediments and debris outside the immediate vicinity of existing structures (e.g., bridges, culverted roadcrossings, water intake structures, etc.). The removal of sediment is limited to the minimum necessary to restore the waterway in the vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend farther than 200 feet in any direction from the structure. This 200 foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an area that has no waters of the United States unless otherwise specifically approved by the district engineer under separate authorization.

(c) This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. After conducting the maintenance activity, temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

(d) This NWP does not authorize maintenance dredging for the primary purpose of navigation. This NWP does not authorize beach restoration. This NWP does not authorize new stream channelization or stream relocation projects.

Notification: For activities authorized by paragraph (b) of this NWP, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 32). The pre-construction notification must include information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals. (Authorities: Section 10 of the Rivers and Harbors Act of 1899 and section 404 of the Clean Water Act (Sections 10 and 404))

Note: This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act section 404(f) exemption for maintenance.



### **NATIONWIDE PERMIT #3, MAINTENANCE, SPECIFIC CONDITIONS**

\*New and additional riprap has been removed from the 2017 NWP#3. Any project proposing new and additional riprap must receive authorization under an Individual Section 401 Water Quality Certification or the Indiana RGP#1. The following conditions apply to NWP #3. All activities that do not meet these conditions require an individual WQC from the IDEM and are not authorized under this WQC.

(1) For activities involving the replacement of a stream encapsulation:

(a) The replacement must not reduce the cross-sectional area under bank full elevation;

(b) The replacement must not increase the length of the total encapsulation to over 150 feet;

(c) The replacement must have either the same slope as the existing encapsulation, or will more closely match the slope of the stream<sup>2</sup> immediately upstream and downstream;

(d) The type of encapsulation must be the same as the existing type of encapsulation;

(e) Bank stabilization and channel bottom stabilization must not exceed either one bank full width upstream and downstream of the replacement encapsulation or ten linear feet whichever is greater;

(f) Any channel bottom stabilization must be flush with the existing grade of the stream bottom; and

(g) Existing encapsulations over 150 feet may be replaced under this NWP as long as the structure length does not change more than 20 feet upstream and 20 feet downstream.

(2) For activities involving the placement of thermal plastic liners or other liner types into existing structures:

(a) Liners may not be used to extend the structure length by more than 12-inches on either end of the structure;

(b) Liners must be installed so that the invert of the liner is as close to the invert of the host pipe as practical;

(c) Riprap scour protection or an energy dissipater must be installed flush with

the upstream and downstream bank and stream channel elevations and grades;

(d) For projects undertaken by the Indiana Department of Transportation (INDOT) and a Local Public Agency (LPA), the project must be reviewed and approved by the INDOT Office of Hydraulics;

(e) The liner size must be the largest size approved by the INDOT Office of Hydraulics;

(f) For projects undertaken by permittees or entities other than INDOT or a LPA, a hydraulic modeling report must be submitted following the INDOT Standards and Specifications found at

[http://www.in.gov/indot/design manual/design manual 2013.htm](http://www.in.gov/indot/design%20manual/design%20manual%202013.htm);

(g) If an existing culvert sump cannot be maintained by the installation of a liner then an individual Section 401 Water Quality Certification is required; and

(h) For perennial streams, the structure must not be in an elevated position (hanging culvert) within the stream channel. Hanging culverts in perennial stream channels require an Individual Section 401 Water Quality Certification.

(3) For all other maintenance activities:

(a) The activity must not permanently affect more than one-tenth (0.1) of an acre of waters of the United States;

(b) The activity must not permanently change the sinuosity, flow path, velocity, cross sectional area under the bank full elevation or the slope of a stream;

(c) The activity must not permanently affect more than 300 linear feet of stream channel, streambank, or lake shoreline;

(d) In the case of bank stabilization activities, the permittee must demonstrate that the bank or shoreline in question is unstable;

(e) The activity must not result in a permanent secondary effect to waters of the United States (e.g., dredging, excavation, damming, creation of in-channel ponds) that, when combined with the primary effect, exceeds the area and

length thresholds specified above; and

(f) Any channel bottom stabilization must be installed flush with the existing stream grade.

## IDNR Construction in a Floodway Permit



State of Indiana  
Department of Natural Resources



**CERTIFICATE OF APPROVAL**

**Application #: FW-30896-0**

This Certificate of Approval is a Permit for Construction under the authority of the Indiana Flood Control Act, IC 14-28-1 with 312 IAC 10 and IC 14-29-1 with 312 IAC 6 as administered by the Department of Natural Resources.

**Approval Issued To:** Hamilton County Board of Commissioners, Matt Lee, 1700 South 10th Street, Noblesville, IN 46060

**Approval Issued By:**

*Markita Shepherdson*

**Mail Date:** 5/25/2021

Markita Shepherdson, CFM, Division of Water

**Permit Effective Date: 06/12/2021**

**Permit Expiration Date: 05/25/2023**

Pursuant to 312 IAC 2-5-1, this Permit becomes Effective eighteen (18) days from the Mail Date to provide a stay period for a Petition for Administrative Review with the Indiana Natural Resources Commission, Division of Hearings. Initiating construction authorized in this Permit prior to the Permit Effective Date constitutes a violation. This Permit is only valid until the Permit Expiration Date.

This Permit may be renewed one (1) time if a written request is received at the DNR, Division of Water, prior to the Permit Expiration Date.

---

**PROJECT INFORMATION:**

Waterbody: Cicero Creek

County: Hamilton

**Project Description Narrative:** The existing concrete I-Beam bridge carrying East 266th Street over Cicero Creek will be replaced in kind. The bridge deck will be replaced, and existing piers and abutments will remain in place. Pier caps will be installed on the existing piers for the new deck placement. The existing structure is a 24' long single span culvert with a 16' span and 6'-6" concrete arches. The new structure will measure 48'-2.5" long with a 25'-8" out to out width and 12' wingwalls. The roadway elevation, low structure elevation and waterway area will not change. Riprap will be installed at the end bents and at the base of the piers for scour protection.

**Project Location:** At the East 266th Street creek crossing near Arcadia

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**PERMIT CONDITIONS:**

This Certificate of Approval is valid only if the construction project is in compliance with all Conditions in this Permit.

**DNR PROJECT SPECIFIC PERMIT CONDITIONS**

- 1) Bridge rehabilitation could affect birds nesting on the structure. Between April 1 and September 7, survey the bridge for any nests before work is initiated. If nests are not found, then work may proceed. If nests are found with eggs, chicks, or parents actively attending to the nest (building the nest and visiting often), then delay work until the birds complete their nesting cycle (to fledging) or the nests fail due to natural causes. If work is planned while nests are active, prior approval from the USDA must be secured by contacting: Wildlife Services State Director, USDA Wildlife Services, 901 W. State Street, W. Lafayette, IN 47907; (765) 494-6229; request Form 37 and any other required documentation and follow the USDA's instructions
- 2) The bridge must be inspected for the presence of bats. If there is no evidence of active bat use, work can proceed. If there is evidence of active bat use, work must not occur between March 1 and November 1 until either the bats leave the structure for the season or a separate permit is issued to remove the bats. Please contact Linnea Petercheff (lpetercheff@dnr.in.gov) regarding permits to handle bats. If bats are present, a more formal survey to determine what species are present may be required.
- 3) Do not place riprap or other streambed stabilization materials in the active stream channel above the existing streambed or flowline elevation in order to prevent obstructions to the movement of aquatic organisms upstream and downstream of the crossing structure. Riprap scour protection must be countersunk so as not to extend above the existing flowline elevation.
- 4) Revegetate all bare and disturbed areas that are not currently mowed and maintained with a mixture of grasses, sedges, and wildflowers native to Central Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion; turf-type grasses (including low-endophyte, friendly endophyte, and endophyte free tall fescue but excluding all other varieties of tall fescue) may be used in currently mowed areas only. A native herbaceous seed mixture must include at least 5 species of grasses and sedges and 5 species of wildflowers.
- 5) Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.
- 6) Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.
- 7) Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.
- 8) Do not use broken concrete as riprap.
- 9) Underlay the riprap with a bedding layer of well graded aggregate or a geotextile to prevent piping of soil underneath the riprap.
- 10) Minimize the movement of resuspended bottom sediment from the immediate project area.
- 11) Do not deposit or allow construction/demolition materials or debris to fall or otherwise enter the waterway.
- 12) Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.
- 13) Seed and protect all disturbed streambanks and slopes not protected by other methods that are 3:1 or steeper with erosion control blankets that are heavy-duty, biodegradable, and net free or that use loose-woven / Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.
- 14) Do not leave felled trees, brush, or other debris in the floodway\*.
- 15) Size and/or anchor the riprap to resist displacement by current or wave action.
- 16) Keep the bridge waterway opening free of debris and sediment at all times.
- 17) Do not allow the lowest portion of the new bridge to extend below the lowest portion of the existing bridge.
- 18) Upon completion of the project, remove all construction debris from the floodway\*.
- 19) Issuance of this Certificate of Approval does not constitute approval of any temporary causeways, coffer dams, runarounds, access bridges or borrow areas associated with the proposed bridge construction. A separate written approval must be obtained from the DNR, Division of Water for these types of projects prior to beginning any work within the floodway\*.
- 20) \* Note: For regulatory purposes, the floodway is defined on the attached Floodway Map.

## DNR PROJECT GENERAL PERMIT CONDITIONS

- 1) Any modifications or additional construction beyond what was shown on plans received at the Division of Water shall require an additional review and approval from the Department of Natural Resources.
- 2) This Permit must be posted and maintained at the project site until the project is completed.
- 3) This Permit shall not be assigned or transferred without the prior written approval of the Department of Natural Resources.
- 4) If any prehistoric or historic archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days.
- 5) This Permit may be revoked by the Department of Natural Resources for violation of any condition or applicable statute or rule.
- 6) The Department of Natural Resources shall have the right to enter upon the site of the permitted activity for the purpose of inspecting the work authorized under this Permit.

Certificate of Approval Attachments: FW-30896 Best Available Map.pdf

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#### **RIGHT TO ADMINISTRATIVE REVIEW:**

A party may appeal this Department of Natural Resources Action through the administrative review procedures found in the Administrative Orders and Procedures Act, IC 4-21.5, and the rules promulgated thereunder 312 IAC 3-1. If an appeal is filed, the final agency determination will be made by the Natural Resources Commission following a legal proceeding conducted before an Administrative Law Judge. The Department of Natural Resources will be represented by legal counsel at all stages of administrative review.

In order to obtain an administrative review, a written petition must be filed with the Division of Hearings within 18 days of the Mail Date of the Action. The petition must contain specific reasons for the appeal and indicate the portion or portions of the project to which the appeal pertains. The petition must be addressed to the Division of Hearings, Indiana Government Center North, Room N103, 100 North Senate Avenue, Indianapolis, Indiana 46204

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#### **SERVICE LIST:**

##### Applicant(s):

Hamilton County Board of Commissioners, Matt Lee, 1700 South 10th Street, Noblesville, IN 46060

##### Agent(s):

DLZ Indiana, LLC, Jon E LaTurner, 138 North Delaware Street, Indianapolis, IN 46204

##### Adjacent Landowners and Interested Parties:

S&S Holdings Group LLC, 21800 Schuller Road, Noblesville, IN 46062

Homeowner, 9802 East 266th Street, Arcadia, IN 46030

Danny Molden, 26595 Mount Pleasant Road, Arcadia, IN 46030

Michael and Patricia Newby, 9815 East 266th Street, Arcadia, IN 46030

##### Courtesy Notification:

US Army Corps of Engineers, Louisville District, PO Box 59, Louisville, KY 40201

Hamilton County SWCD, Mark McCauley, 1717 Pleasant Street, Suite 100, Noblesville, IN 46060

Chuck Kiphart, One Hamilton County Square, Suite 306, Noblesville, IN 46060

CJ Taylor, 331 West Jackson Street PO Box 650, Cicero, IN 46034

Hamilton County Drainage Board, 1 Hamilton County Square, Suite 188, Noblesville, IN 46060

DNR District 4 Headquarters, 3734 Mounds Road Anderson Indiana, Anderson, IN 46017

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**ADDITIONAL PERMITTING AGENCIES:**

This is not a waiver of any local ordinance or other state or federal law and does not relieve the permittee of any liability for the effects which the project may have upon the safety of the life or property of others.

This does not relieve the permittee of the responsibility of obtaining permits, approvals, easements, etc. under other regulatory programs administered by, but not limited to, the U.S. Army Corps of Engineers, County Drainage Board, Indiana Department of Environmental Management and local, city, or county floodplain management, planning or zoning commissions.





State of Indiana  
Department of Natural Resources



**CERTIFICATE OF APPROVAL**

**Application #: FW-30896-0**

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- 6) The Department of Natural Resources shall have the right to enter upon the site of the permitted activity for the purpose of inspecting the work authorized under this Permit.

Certificate of Approval Attachments: FW-30896 Best Available Map.pdf

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##### Applicant(s):

Hamilton County Board of Commissioners, Matt Lee, 1700 South 10th Street, Noblesville, IN 46060

##### Agent(s):

DLZ Indiana, LLC, Jon E LaTurner, 138 North Delaware Street, Indianapolis, IN 46204

##### Adjacent Landowners and Interested Parties:

S&S Holdings Group LLC, 21800 Schullley Road, Noblesville, IN 46062

Homeowner, 9802 East 266th Street, Arcadia, IN 46030

Danny Molden, 26595 Mount Pleasant Road, Arcadia, IN 46030

Michael and Patricia Newby, 9815 East 266th Street, Arcadia, IN 46030

##### Courtesy Notification:

US Army Corps of Engineers, Louisville District, PO Box 59, Louisville, KY 40201

Hamilton County SWCD, Mark McCauley, 1717 Pleasant Street, Suite 100, Noblesville, IN 46060

Chuck Kiphart, One Hamilton County Square, Suite 306, Noblesville, IN 46060

CJ Taylor, 331 West Jackson Street PO Box 650, Cicero, IN 46034

Hamilton County Drainage Board, 1 Hamilton County Square, Suite 188, Noblesville, IN 46060

DNR District 4 Headquarters, 3734 Mounds Road Anderson Indiana, Anderson, IN 46017

---

**ADDITIONAL PERMITTING AGENCIES:**

This is not a waiver of any local ordinance or other state or federal law and does not relieve the permittee of any liability for the effects which the project may have upon the safety of the life or property of others.

This does not relieve the permittee of the responsibility of obtaining permits, approvals, easements, etc. under other regulatory programs administered by, but not limited to, the U.S. Army Corps of Engineers, County Drainage Board, Indiana Department of Environmental Management and local, city, or county floodplain management, planning or zoning commissions.

## IDEM 401 Permit

## David Henkle

---

**From:** Bradley Dove  
**Sent:** Tuesday, March 09, 2021 2:32 PM  
**To:** Tucker Born  
**Subject:** FW: Hamilton County SS 23017 (191st St over UNT Stony Creek) - 401 Permit  
**Attachments:** Signed Section 401 for the RGP with cover letter - December 2019.pdf

IDEM Authorization ID No. 2020-786-29-ALF-X

Thanks,

**Bradley Dove** | Civil Engineer

317-633-4120 x285 (office)  
[bdove@dlz.com](mailto:bdove@dlz.com) | [www.dlz.com](http://www.dlz.com)



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**From:** Farren, Amari <AFarren@idem.IN.gov>  
**Sent:** Friday, November 13, 2020 8:11 PM  
**To:** Bradley Dove <bdove@dlz.com>  
**Subject:** RE: Hamilton County SS 23017 (191st St over UNT Stony Creek) - 401 Permit

**EXTERNAL:** Message origin is from an external network. Use proper judgment and caution when opening attachments, clicking links, or responding to this email.

Yes, the project was assigned IDEM ID No. 2020-786-29-ALF-X.

Amari

---

**From:** Bradley Dove <[bdove@dlz.com](mailto:bdove@dlz.com)>  
**Sent:** Friday, November 13, 2020 2:43 PM  
**To:** Farren, Amari <[AFarren@idem.IN.gov](mailto:AFarren@idem.IN.gov)>  
**Subject:** RE: Hamilton County SS 23017 (191st St over UNT Stony Creek) - 401 Permit

\*\*\*\* This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. \*\*\*\*

---

Amari,

Can you provide the authorization # for this project? It was submitted on Oct. 8<sup>th</sup> so it has been over the 30 days.

Thank you,

**Bradley Dove | Civil Engineer**

317-633-4120 x285 (office)  
[bdove@dlz.com](mailto:bdove@dlz.com) | [www.dlz.com](http://www.dlz.com)



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---

**From:** Bradley Dove

**Sent:** Thursday, October 8, 2020 3:37 PM

**To:** Farren, Amari <[AFarren@idem.IN.gov](mailto:AFarren@idem.IN.gov)>

**Cc:** Keller, Sarah J CIV USARMY CELRL (USA) <[Sarah.J.Keller@usace.army.mil](mailto:Sarah.J.Keller@usace.army.mil)>; Jonathan LaTurner, PE <[jlaturner@dlz.com](mailto:jlaturner@dlz.com)>

**Subject:** RE: Hamilton County SS 23017 (191st St over UNT Stony Creek) - 401 Permit

Amari,

Attached is the resubmittal for the 401 permit per your "Out of Scope" request below.

We revised the plan and cross section as appropriate per your request to include the stream bed excavated soil within the structure section. The application includes the updated quantities.

If you have any questions, please contact me via email or at 317-633-4120.

Thank you,

**Bradley Dove | Civil Engineer**

317-633-4120 x285 (office)  
[bdove@dlz.com](mailto:bdove@dlz.com) | [www.dlz.com](http://www.dlz.com)



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---

**From:** Farren, Amari <[AFarren@idem.IN.gov](mailto:AFarren@idem.IN.gov)>

**Sent:** Tuesday, September 15, 2020 8:19 AM

**To:** Bradley Dove <[bdove@dlz.com](mailto:bdove@dlz.com)>; Faraz J. Khan <[faraz.khan@hamiltoncounty.in.gov](mailto:faraz.khan@hamiltoncounty.in.gov)>

**Cc:** Keller, Sarah J CIV USARMY CELRL (USA) <[Sarah.J.Keller@usace.army.mil](mailto:Sarah.J.Keller@usace.army.mil)>

**Subject:** RE: Hamilton County SS 23017 (191st St over UNT Stony Creek) - 401 Permit

**EXTERNAL:** Message origin is from an external network. Use proper judgment and caution when opening attachments, clicking links, or responding to this email.

Good Morning,

Attached is your copy of the RGP Out of Scope letter for the above referenced project. Please let me know if you have questions after you've had a chance to review. A hard copy will not be sent unless requested.

Thanks,  
Amari

**Coping with COVID-19:**

- **Indiana State Dept. of Health (ISDH) COVID-19 Call Center:** Call 877-826-0011 (open 24/7)
- **Anthem NurseLine:** Call 800-337-4770 or visit the Anthem NurseLine online for a FREE symptom screening. Available to anyone with an Anthem health plan (this includes State of IN employees)
- **Anthem Employee Assistance Program (EAP):** Available to ALL state employees and adults in household regardless of health plan participation. Call 800-223-7723 or visit [anthemeap.com](http://anthemeap.com) (enter State of Indiana) for crisis counseling, help finding child/elder care, legal/financial consultation and much more.



Amari Farren, Wetlands, Lakes, and Streams Project Manager  
Wetlands and Stormwater Section, Office of Water Quality  
100 North Senate Avenue, Room 1255  
Indianapolis Indiana 46204  
Phone: (317) 234-6351  
Fax: 317-234-4145  
[afarren@idem.IN.gov](mailto:afarren@idem.IN.gov)

Section 401 Water Quality Certification & Isolated Wetlands Program: <http://wetlands.in.gov>  
Storm Water Program: <http://www.in.gov/idem/stormwater>  
Indiana Storm Water Quality Manual: <http://www.in.gov/idem/stormwater/2363.htm>

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Indiana Department of Environmental Management



**IDEM values your feedback.**

Have a question or need more information? Visit [www.in.gov/idem](http://www.in.gov/idem)



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**From:** Bradley Dove <[bdove@dlz.com](mailto:bdove@dlz.com)>  
**Sent:** Thursday, August 27, 2020 2:06 PM  
**To:** Farren, Amari <[AFarren@idem.IN.gov](mailto:AFarren@idem.IN.gov)>  
**Subject:** RE: Hamilton County SS 23017 (191st St over UNT Stony Creek) - 401 Permit

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Thank you for the update!

Hope all is well with you during this time.

**Bradley Dove** | Civil Engineer

317-633-4120 x285 (office)  
[bdove@dlz.com](mailto:bdove@dlz.com) | [www.dlz.com](http://www.dlz.com)



INNOVATIVE IDEAS  
EXCEPTIONAL DESIGN  
UNMATCHED CLIENT SERVICE



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**From:** Farren, Amari <[AFarren@idem.IN.gov](mailto:AFarren@idem.IN.gov)>  
**Sent:** Thursday, August 27, 2020 1:04 PM  
**To:** Bradley Dove <[bdove@dlz.com](mailto:bdove@dlz.com)>; Turner, James <[JTurner2@idem.IN.gov](mailto:JTurner2@idem.IN.gov)>  
**Subject:** RE: Hamilton County SS 23017 (191st St over UNT Stony Creek) - 401 Permit

**EXTERNAL:** Message origin is from an external network. Use proper judgment and caution when opening attachments, clicking links, or responding to this email.

Brad,

I am still handling permit applications, and will be reviewing this project. I've received the application and will be in touch if I have any questions after I've had a chance to review.

---

**From:** Bradley Dove <[bdove@dlz.com](mailto:bdove@dlz.com)>  
**Sent:** Thursday, August 27, 2020 12:14 PM  
**To:** Turner, James <[JTurner2@idem.IN.gov](mailto:JTurner2@idem.IN.gov)>  
**Cc:** Farren, Amari <[AFarren@idem.IN.gov](mailto:AFarren@idem.IN.gov)>  
**Subject:** FW: Hamilton County SS 23017 (191st St over UNT Stony Creek) - 401 Permit

\*\*\*\* This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. \*\*\*\*

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Jay,

Thought I would include you on this as well. Per Amari's automated response, it appears that you are also handling permits for Hamilton County since she is on a Part-Time Schedule.

Thank you,

**Bradley Dove** | Civil Engineer

317-633-4120 x285 (office)  
[bdove@dlz.com](mailto:bdove@dlz.com) | [www.dlz.com](http://www.dlz.com)



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**From:** Bradley Dove  
**Sent:** Thursday, August 27, 2020 12:08 PM  
**To:** Farren, Amari <[AFarren@idem.IN.gov](mailto:AFarren@idem.IN.gov)>  
**Cc:** Jonathan LaTurner, PE <[jlaturner@dlz.com](mailto:jlaturner@dlz.com)>  
**Subject:** Hamilton County SS 23017 (191st St over UNT Stony Creek) - 401 Permit

Amari,

Attached is the IDEM 401 Application and supporting documentation for the above referenced project.

The project includes roadway improvements and a culvert replacement for a portion of 191<sup>st</sup> Street over a UNT to Stony Creek in Hamilton County, IN. The stream impacts will be for a length of approximately 127 lft which includes the 67 lft structure length, the wingwalls for the structure and riprap near the inlets and outlets.

Per a conversation with Randy Braun back in April, it was noted that at the current time we could submit the application with the electronic signature since most people are still working remotely.

If you have any questions, please contact me via email or at 317-633-4120.

Thank you,

**Bradley Dove** | Civil Engineer

317-633-4120 x285 (office)  
[bdove@dlz.com](mailto:bdove@dlz.com) | [www.dlz.com](http://www.dlz.com)



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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

Eric J. Holcomb  
Governor

Bruno L. Pigott  
Commissioner

December 3, 2019

**VIA CERTIFIED MAIL**

**7011 0110 0002 0578 4027**

Mr. Michael Ricketts  
U.S. Army Corps of Engineers  
Louisville District  
P.O. Box 59  
Louisville, KY 40201-0059

Dear Mr. Ricketts:

Re: Section 401 Water Quality Certification  
Project: 2019 Reissuance of Regional  
General Permit No. 1 for Indiana

The Office of Water Quality has reviewed the Joint Public Notice/Application for Section 401 Water Quality Certification (WQC) dated August 22, 2019. According to the application, the U.S. Army Corps of Engineers (USACE) proposes to reissue the Regional General Permit No. 1 (RGP #1) for the state of Indiana. The RGP #1 is intended to authorize categories of activities that are similar in nature and cause minimal individual and cumulative impacts to the aquatic environment.

The Louisville, Detroit, and Chicago Districts of the USACE developed the existing Indiana RGP to replace several Nationwide Permits (NWP). As a consequence of this action, the following NWPs have been suspended and will not be in effect for the state of Indiana. The USACE proposes to suspend the following:

- NWP 13 Bank Stabilization
- NWP 14 Linear Transportation Projects
- NWP 18 Minor Discharges
- NWP 29 Residential Developments
- NWP 36 Boat Ramps
- NWP 39 Commercial and Institutional Developments
- NWP 40 Agricultural Activities
- NWP 41 Reshaping Existing Drainage Ditches
- NWP 42 Recreational Facilities
- NWP 43 Stormwater Management Facilities
- NWP 44 Mining Activities

Since these NWPs are suspended in Indiana, no Section 401 WQC decision is required.

Based on available information, it is the judgment of this office that the RGP #1 will comply with the applicable provisions of 327 IAC 2 and Sections 301, 302, 303, 306, and 307 of the Clean Water Act if the recipient of the certification complies with the conditions set forth in the Section 401 Water Quality Certification 2019-602-00-JWR-A. Therefore, subject to the terms and conditions of Section 401 Water Quality Certification 2019-602-00-JWR-A, the Indiana Department of Environmental Management (IDEM) grants Section 401 WQC for the RGP #1. Any changes in the language or scope of the RGP #1 not detailed in the Joint Public Notice/Application, or as modified by Section 401 Water Quality Certification 2019-602-00-JWR-A, are not authorized.

If you have any questions about this certification, please contact Jason Randolph, Project Manager, of my staff by email at [jrandolp@idem.in.gov](mailto:jrandolp@idem.in.gov) or by telephone at 317-233-0467.

Sincerely,



Martha Clark Mettler  
Assistant Commissioner  
Office of Water Quality

cc: Kimberly Simpson, USACE-Louisville  
Aaron Damrill, USACE-Detroit, Michiana Branch  
Paul Leffler, USACE-Chicago  
Scott Pruitt, USFWS-Bloomington  
Matt Buffington, IDNR  
Brain Wolff, IDEM Branch Chief – Surface Water, Operations and Enforcement  
Randy Braun, IDEM Section Chief Wetlands and Stormwater

**Enclosure**



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Eric J. Holcomb  
Governor

Bruno L. Pigott  
Commissioner

### **Section 401 Water Quality Certification** **for the** **2019 Reissuance of Indiana Regional General Permit No. 1**

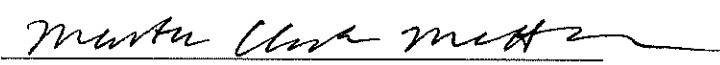
Authorization Number: 2019-602-00-JWR-A

USACE Number: LRL-2018-00988

Authority: 327 IAC 2. CWA Sections: 301, 302, 303, 306, 307, & 401

Effective Date: December 3, 2019

Expiration Date: In the absence of another action by IDEM that would alter the termination date of this certification, this certification shall expire on December 15, 2024, the expiration date of the federal permit this certifies.

Approved: 

Martha Clark Mettler  
Assistant Commissioner  
Office of Water Quality

Applicant / Permittee: U.S. Army Corps of Engineers

The Office of Water Quality has reviewed the Joint Public Notice/Application for Section 401 Water Quality Certification (WQC) dated August 22, 2019. According to the application, the U.S. Army Corps of Engineers (USACE) proposes to reissue the Regional General Permit No. 1 (RGP #1) for the state of Indiana. The RGP #1 is intended to authorize categories of activities that are similar in nature and cause minimal individual and cumulative impacts to the aquatic environment.

The Louisville, Detroit, and Chicago Districts of the USACE developed the existing Indiana RGP to replace several Nationwide Permits (NWP). As a consequence of this



action, the following NWP's have been suspended and will not be in effect for the state of Indiana. The USACE proposes to suspend the following:

- NWP 13 Bank Stabilization
- NWP 14 Linear Transportation Projects
- NWP 18 Minor Discharges
- NWP 29 Residential Developments
- NWP 36 Boat Ramps
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- NWP 40 Agricultural Activities
- NWP 41 Reshaping Existing Drainage Ditches
- NWP 42 Recreational Facilities
- NWP 43 Stormwater Management Facilities
- NWP 44 Mining Activities

Since these NWP's are suspended in Indiana, no Section 401 WQC decision is required.

Based on available information, it is the judgment of this office that the RGP #1 will comply with the applicable provisions of 327 IAC 2 and Sections 301, 302, 303, 306, and 307 of the Clean Water Act if the recipient of the certification complies with the conditions set forth below. Therefore, subject to the following terms and conditions, the Indiana Department of Environmental Management (IDEM) hereby grants Section 401 WQC for the RGP #1. Any changes in the language or scope of the RGP #1 not detailed in the Joint Public Notice/Application, or as modified by the conditions below, are not authorized by this certification.

#### **APPLICANT RESPONSIBILITIES:**

(1) An applicant seeking coverage under this Section 401 WQC must:

- (a) Demonstrate, via letter from the Indiana Department of Natural Resources (IDNR), Division of Nature Preserves, that no state endangered, threatened, or rare species are documented on a permanent or seasonal basis within ½-mile radius of the proposed project site. If you have listed species you must provide documentation from the IDNR that states your project will not impact the listed species.
- (b) Submit a complete Section 401 WQC Regional General Permit Notification Form (most current State Form 51937) (referred to hereinafter as the "notification") at least 30 days prior to the activity or receive verification from the IDEM Office of Water Quality stating the proposed project meets the terms and conditions of this Section 401 WQC. The notification submitted to the IDEM Office of Water Quality must at a minimum provide applicant information, project location, existing project site conditions, project impacts, and a proposed plan. Failure to submit all required information will result in the project being considered out-of-scope and not authorized.

- (c) Provide any additional information required by the IDEM to verify that a given project will qualify under the terms and conditions of this Section 401 WQC. If the applicant fails to provide any requested information, the project is not authorized.
- (d) Allow the commissioner or an authorized representative of the commissioner (including an authorized contractor), upon the presentation of credentials, to enter upon the applicant's property to inspect the project site during the review of a proposed project.

## **PERMITTEE RESPONSIBILITIES**

- (1) Permittees qualifying for impacts under this Section 401 WQC must:
  - (a) Execute the project per the information contained in the notification submitted to the IDEM.
  - (b) Allow the commissioner or an authorized representative of the commissioner (including an authorized contractor), upon the presentation of credentials to:
    - 1. Enter upon the permittee's property.
    - 2. Access and copy at reasonable times any records that must be kept under the conditions of this certification.
    - 3. Inspect, at reasonable times, any monitoring or operational equipment or method; collection, treatment, pollution management or discharge facility or device; practices required by this certification; and any mitigation wetland site.
    - 4. Sample or monitor any discharge of pollutants or any mitigation site.
  - (c) Obtain any other permits or authorizations required for this project or related activities from IDEM or any other local, state, or federal agency or person. Land-disturbing activities of one (1) acre or more or disturbances of less than an acre that are part of a larger common plan will require permit coverage for discharges associated with construction site run-off. Additional information should be obtained through the IDEM Stormwater Program at [www.in.gov/idem/stormwater](http://www.in.gov/idem/stormwater) or at 317-233-1864 or via email at [Stormwat@idem.IN.gov](mailto:Stormwat@idem.IN.gov). In addition, the Indiana Department of Natural Resources (317-232-4160 or toll free at 877-928-3755) should be contacted concerning the possible requirement of natural freshwater lake or floodway permits.
  - (d) Deposit any dredged material in a contained upland disposal area outside of any water of the state and implement appropriate measures to prevent sediment run-off to any waterbody.
  - (e) Install run-off and sediment control measures prior to any land disturbance to manage stormwater and to minimize sediment from leaving the project site or entering a waterbody. All operations must phase project activities to minimize the impact of sediment to the receiving waterbody(ies). Erosion and sediment

control measures shall be implemented using an appropriate order of construction (sequencing) relative to the land-disturbing activities. Wetlands and/or waterbodies adjacent to land-disturbing activities must be protected with appropriate sediment control measures. As work progresses, all areas void of protective cover shall be re-vegetated or stabilized as described in the plan. Areas that are to be re-vegetated must utilize mulch that is anchored or, under more severe conditions, erosion control blankets. Standards and specifications for stormwater management, including erosion and sediment control can be obtained in the Indiana Stormwater Quality Manual or similar guidance documents.

#### **TERMS OF THIS SECTION 401 WQC:**

- (1) Although a project may meet the terms and conditions of this certification, IDEM may require an individual Section 401 WQC if the agency determines that the project would potentially have more than minimal impacts to water quality, either viewed individually or collectively with other projects that may impact the same watershed affected by the proposed project.
- (2) IDEM retains the right to review, modify, terminate, replace or amend this certification as needed to ensure that the federal permits or licenses certified do not result in violations of Indiana's Water Quality Standards or other applicable state laws.

#### **SPECIFIC CONDITIONS OF THIS SECTION 401 WQC**

- (1) This Section 401 WQC does not :
  - (a) Convey any property rights of any sort, or any exclusive privileges.
  - (b) Preempt any duty to obtain federal, state or local permits or authorizations required by law for the execution of the project or related activities.
- (2) This Section 401 WQC does not authorize:
  - (a) Impacts or activities that do not meet the terms and conditions of this Section 401 WQC. Such activities require an individual Section 401 WQC from the IDEM.
  - (b) Any injury to permittees or private property or invasion of other private rights, or any infringement of federal, state or local laws or regulations.
  - (c) Changes to the original plan design detailed in the notification.
  - (d) The discharge of pollutants, principally sediment, associated with stormwater run-off.



- (e) Discharges of pollutants other than clean fill<sup>1</sup> and uncontaminated dredged material.
- (f) Activities on or in any of the State's waters that have been designated as salmonid waters (cold water streams) or tributaries of salmonid waters within a two river mile reach upstream from the confluence with the salmonid water unless the activity meets one or more of the following conditions:
  - 1. Bank stabilization activities that:
    - a. Are completed using bioengineered methods, riprap, and/or glacial stone, that conforms to the existing shoreline and does not project out into the channel, and
    - b. Do not create a wall.
    - c. Do not include the installation of cofferdams, causeways, temporary access roads, or dewatering activities.
  - 2. Encapsulations that:
    - a. Are installed to span the width of the ordinary high water mark (OHWM), and are embedded in accordance with Specific Condition 3(f)7 below, and
    - b. Do not include the installation of cofferdams, causeways, temporary access roads, or dewatering activities.
    - c. Are installed outside the salmonid fish spawning dates of March 15 through June 15 and from July 15 through November 30.
  - 3. Work is conducted outside the salmonid fish spawning dates of March 15 through June 15 and from July 15 through November 30.
- (g) Activities on or in any Outstanding State and/or National Resource waters (see Attachment #1), or in any critical wetland or critical special aquatic sites (see Attachment #2).
- (h) Activities associated with the establishment of a mitigation bank.
- (i) Activities that have a cumulative permanent impact of more than twenty-five hundredths (0.25) acre of waters of the U.S. Note: Activities that have a cumulative permanent impact to waters of the U.S. of more than one-tenth (0.10) acre must comply with the mitigation requirements listed in Specific Conditions (3)(k) below.
- (j) Activities that will have a cumulative permanent impact of more than 500 linear feet of waters of the U.S. Note: Activities that have a cumulative permanent impact to waters of the U.S. of more than 300 linear feet must comply with the mitigation requirements listed in Specific Conditions (3)(l) below.
- (k) Activities that will permanently change the sinuosity, flow path, velocity, cross-sectional area under the Ordinary High Water Mark (OHWM), or the slope of

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<sup>1</sup> Clean fill, for purposes of this WQC, means uncontaminated rocks, bricks, concrete without rebar, road demolition waste materials other than asphalt, or earthen material.

a stream<sup>2</sup> except those that may be authorized through compliance with Conditions (3)(a), (3)(d), and (3)(f).

- (l) The installation of encapsulations for purposes other than road, driveway, and pedestrian crossings.
- (3) This Section 401 WQC authorizes:
- (a) Minimal changes to stream morphology, including minor relocations, which result in a net benefit to the aquatic ecosystem. Stream relocations may be authorized, provided the activity:
    - 1. Is associated with the installation of a stream crossing or replacement of an existing crossing, and results in a net benefit to the stream morphology.
    - 2. Does not reduce the cross-sectional area under the OHWM.
    - 3. Is accompanied by an acceptable restoration/stabilization plan.
    - 4. Does not accelerate stream instability. Examples of instability include, but are not limited to, stream bank erosion, channel enlargement, channel incision, degradation, aggradation, meander migration (down-valley and lateral accretion), avulsion and base-level shifts.
  - (b) Stream bank stabilization activities or new lake and reservoir shoreline stabilization that will permanently affect 500 linear feet or less and the applicant demonstrates that the bank or shoreline in question is unstable. Natural shoreline stabilization methods are required where there is no pre-existing seawall or other shoreline hard armament on a lake or reservoir. Natural shoreline stabilization methods include bank stabilization practices that benefit the aquatic environment by incorporating organic materials to produce functional structures, provide wildlife habitat, and provide areas for revegetation.
  - (c) Placement of riprap or other bank stabilization materials provided the design and installation is flush with the upstream and downstream bank and stream channel/lake bed elevations and grades.
  - (d) New bridge piers, piles, shafts or other support structures and their associated scour protection measures that do not significantly reduce the cross-sectional area of the stream and are located below the OHWM and outside the low flow channel of the stream.
  - (e) Activities that do not result in a permanent secondary effect to waters of the U.S. Potential secondary effects include, but are not limited to damming, loss of hydrology, and creation of in-channel ponds.
  - (f) Permanent stream encapsulations that:
    - 1. Are for the purpose of constructing a crossing.

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<sup>2</sup> Stream, for the purposes of this WQC, means waters of the U.S. that have a defined bed and bank and convey water ephemerally, intermittently or perennially. This term includes natural streams, relocated streams, channelized streams, artificial channels, encapsulated channels and ditches.

2. Allow the passage of aquatic organisms in the waterbody.
3. Do not exceed 150 cumulative linear feet of encapsulation.
4. Have at least one (1) opening with a cross-sectional area at least twenty percent (20%) larger than the area under the OHWM of the stream immediately upstream and downstream of the encapsulation. If multiple encapsulations are proposed, then the largest culvert meeting the cross sectional area requirement must be positioned in the channel to align with the existing flow of the channel.
5. Have a streambed slope within the encapsulation that matches the slope of the bed both immediately upstream and downstream.
6. Do not create or accelerate stream instability. Examples of stream instability include, but are not limited to head cutting, stream bank erosion, channel enlargement, channel incision, degradation, aggradation, meander migration, (down-valley and lateral accretion), avulsion and base-level shifts.
7. Either have no bottom (e.g., three sided culvert) or are embedded (sumped)<sup>3</sup> into the stream channel based on the following structure sizes and substrate types:
  - a. Stream bed of sand
    - Structure < four (4) feet wide: Six (6) inch sump
    - Structure four (4) feet wide to 12 feet wide: 12 inch sump
    - Structure 12 feet to 20 feet wide: 18 inch sump
  - b. Stream bed of other soil or unconsolidated till <sup>4</sup>
    - Structure < four (4) feet wide: Three (3) inch sump
    - Structure four (4) feet wide to 12 feet wide: Six (6) inch sump
    - Structure 12 feet to 20 feet wide: 12 inch sump
  - c. Stream bed of bedrock or consolidated till <sup>5</sup>
    - Inside elevation of the structure bottom shall be a minimum of three (3) inches below the surface of the bedrock or consolidated till
8. Meet the following requirements when installed in perennial streams with OHWM width of 12 feet or greater. These encapsulations must:
  - a. Be sumped to a greater depth if needed for the design of the streambed inside the encapsulation.
  - b. Have a width equal to or wider than the existing OHWM.
  - c. Have a natural stream bottom. If the stream bottom will be disturbed during construction (e.g. four sided box culverts or pipe culverts or because of footer work for three sided culverts), natural stream substrate must be placed in the encapsulation in accordance with the Federal Highway Administration Hydraulic Engineering Circular No. 26: Culvert Design for Aquatic Organism Passage.

<sup>3</sup> Sump, for the purpose of this Water Quality Certification, means the inside elevation of the bottom of the structure is placed at a specified depth below the grade of the stream.

<sup>4</sup> Other soil and unconsolidated till includes substrates that are more cohesive and less mobile (e.g. clay, silt, gravel, and cobble substrates).

<sup>5</sup> Consolidated till includes dense hard materials such as hardpan.

- d. Have a low flow channel constructed or restored through the encapsulation. The low flow channel shall have the same width, depth, and side slope as the natural upstream and downstream low flow channel. If the upstream and downstream channels are highly degraded a V-shaped channel with 5:1 slopes within the structure may be substituted.
- (g) Stream pump-around activities, provided:
  - 1. The discharge from the activity does not cause erosion at the outlet.
  - 2. Cofferdam dewatering activities are directed to a filter bag(s), upland sediment basins/traps, or a combination of other appropriate sediment control measures to minimize the discharge of sediment-laden water into waters of the U.S.
  - 3. All sediment control measures are installed and maintained in good working order.
  - 4. Any materials used for an in-stream dam are constructed using non erodible materials. Examples include sand bags and sheet pile walls.
- (h) The installation of temporary work causeways when the activity is conducted in a manner that maintains near normal downstream flows and is constructed of material that can be expected to withstand high flow events.
- (i) The use of temporary structures provided the structures are removed in their entirety and the stream channel restored to preconstruction grades, contours, and vegetative conditions.
- (j) Multiple impacts on a project as long as the cumulative amount of those impacts are less than the most restrictive thresholds of this Section 401 WQC.
- (k) Cumulative permanent impacts to waters of the state greater than 0.10 acre up to and including 0.25 acre are authorized provided the following conditions are met:
  - 1. The impacts comply with all conditions of this Section 401 Water Quality Certification.
  - 2. Mitigation is provided for all impacts.
  - 3. Sufficient mitigation credits are available in the service area where the impacts occur. Note: Credits may not be available at all times. Failure to purchase credits before impacting water resources will require an individual 401 WQC and may result in additional mitigation requirements to compensate for temporal loss of water resource functions.
  - 4. Mitigation credits are purchased from an approved compensatory mitigation bank or through the Indiana Stream and Wetland Mitigation Program (in-lieu fee (ILF)). Permittee responsible mitigation is not authorized under this 401 WQC.
  - 5. The amount of mitigation credit purchased is 1:1 for streams, open water, and farmed wetlands, 2:1 for emergent wetland, 3:1 for scrub shrub wetland, 4:1 for forested wetland.

6. The credits are purchased in the bank or ILF service area where the impacts occur.
  7. Proof of a finalized credit purchase is provided to IDEM:
    - a. Before the impacts occur. Note: Banks and ILF programs may require 30 days or more to finalize a purchase.
    - b. Within one (1) year of IDEM's receipt of the RGP Notification form.
- (l) Cumulative permanent impacts to waters of the state greater than 300 linear feet up to and including 500 linear feet provided the following conditions are met:
1. The impacts comply with all conditions of this Section 401 Water Quality Certification.
  2. Mitigation is provided for all impacts.
  3. Sufficient mitigation credits are available in the service area where the impacts occur. Note: Credits may not be available at all times. Failure to purchase credits before impacting water resources will require an individual 401 WQC and may result in additional mitigation requirements to compensate for temporal loss of water resource functions.
  4. Mitigation credits are purchased from an approved compensatory mitigation bank or through the ILF program. Permittee responsible mitigation is not authorized under this 401 WQC.
  - ~~5. The amount of mitigation credit purchased is 1:1 for streams.~~
  6. The credits are purchased in the bank or ILF service area where the impacts occur.
  7. Proof of a finalized credit purchase is provided to IDEM:
    - a. Before the impacts occur. Note: Banks and ILF programs may require 30 days or more to finalize a purchase.
    - b. Within one (1) year of IDEM's receipt of the RGP Notification form.

Failure to comply with the terms and conditions of this Section 401 Water Quality Certification may result in an enforcement action. If an enforcement action is pursued, civil penalties could be assessed up to \$25,000 per day. Criminal liability may apply if it is determined that the Section 401 Water Quality Certification was violated willfully or negligently.

#### **Notice of Right to Administrative Review**

If you wish to challenge this permit, you must file a Petition for Administrative Review with the Office of Environmental Adjudication (OEA), and serve a copy of the petition upon IDEM. The requirements for filing a Petition for Administrative Review are found in IC 4-21.5-3-7, IC 13-15-6-1 and 315 IAC 1-3-2. A summary of the requirements of these laws is provided below.

A Petition for Administrative Review must be filed with the Office of Environmental Adjudication (OEA) within fifteen (15) days of the issuance of this notice (eighteen (18) days if you received this notice by U.S. Mail), and a copy must be served upon IDEM.

Addresses are:

Director	Commissioner
Office of Environmental Adjudication	Indiana Dept. of Environmental Management
Indiana Government Center North	Indiana Government Center North
100 North Senate Avenue, Room N103	100 North Senate Avenue, Room 1301
Indianapolis, Indiana 46204	Indianapolis, Indiana 46204

The petition must contain the following information:

- (a) The name, address and telephone number of each petitioner.
- (b) A description of each petitioner's interest in the permit.
- (c) A statement of facts demonstrating that each petitioner is:
  - (1) a person to whom the order is directed;
  - (2) aggrieved or adversely affected by the permit; or
  - (3) entitled to administrative review under any law.
- (d) The reasons for the request for administrative review.
- (e) The particular legal issues proposed for review.
- (f) The alleged environmental concerns or technical deficiencies of the denial.
- (g) The permit terms and conditions that the petitioner believes would be appropriate and would comply with the law.
- (h) The identity of any persons represented by the petitioner.
- (i) The identity of the person against whom administrative review is sought.
- (j) A copy of the permit that is the basis of the petition.
- (k) A statement identifying petitioner's attorney or other representative, if any.

Failure to meet the requirements of the law with respect to a Petition for Administrative Review may result in a waiver of your right to seek administrative review of the permit. Examples are:

- (a) Failure to file a Petition by the applicable deadline;
- (b) Failure to serve a copy of the Petition upon IDEM when it is filed; or
- (c) Failure to include the information required by law.

If you seek to have a permit stayed during the administrative review, you may need to file a Petition for a Stay of Effectiveness. The specific requirements for such a Petition can be found in 315 IAC 1-3-2 and 315 IAC 1-3-2.1.

Pursuant to IC 4-21.5-3-17, OEA will provide all parties with notice of any pre-hearing conferences, preliminary hearings, hearings, stays, or orders disposing of the review of this action. If you are entitled to notice under IC 4-21.5-3-5(b) and would like to obtain notices of any pre-hearing conferences, preliminary hearings, hearings, stays, or orders disposing of the review of this action without intervening in the proceeding you must submit a written request to OEA at the address above.

If you have procedural or scheduling questions regarding your Petition for Administrative Review, additional information on the review process is available at the website of the Office of Environmental Adjudication at <http://www.in.gov/oea>.

## **Attachment 1: Indiana Waters Designated for Special Protection**

### **Designated Salmonid Waters: [327 IAC 2-1.5-5(a)(3)]**

- Trail Creek and its tributaries downstream to Lake Michigan, LaPorte County
- East Branch of the Little Calumet River and its tributaries downstream to Lake Michigan via Burns Ditch, Porter and LaPorte Counties
- Salt Creek above (upstream of) its confluence with the Little Calumet River, Porter County
- Kintzele Ditch (Black Ditch) from Beverly Drive downstream to Lake Michigan, Porter County
- The Galena River and its tributaries, LaPorte County
- The St. Joseph River and its tributaries in St. Joseph County from the Twin Branch Dam in Mishawaka downstream to the Indiana/Michigan state line, St. Joseph County
- The Indiana portion of the open waters of Lake Michigan
- Those waters designated by the Indiana Department of Natural Resources (IDNR) for put-and-take trout fishing<sup>6</sup>

### **Waterbodies which have been designated all or partially as Outstanding State Resource Waters: [327 IAC 2-1-11(b), 327 IAC 2-1.3-3(d), and 327 IAC 2-1.5-19(b)]**

- Big Pine Creek in Warren County downstream of the State Road 55 bridge near the town of Pine Village to its confluence with the Wabash River
- Mud Pine Creek in Warren County from the bridge on the County Road between Brisco and Rainsville to its confluence with Big Pine Creek
- Fall Creek in Warren County from the old C.R. 119 bridge in the NW quarter of Section 21, Township 22N, Range 8W downstream to its confluence with Big Pine Creek
- Indian Creek in Montgomery County from the County Road 650 West bridge downstream to its confluence with Sugar Creek
- Clifty Creek in Montgomery County within the boundaries of Pine Hills Nature Preserve
- Bear Creek in Fountain County from the bridge on County Road 450 North to its confluence with the Wabash River
- Rattlesnake Creek in Fountain County from the bridge on County Road 450 North to its confluence with Bear Creek
- The small tributary to Bear Creek in Fountain County within the Portland Arch Nature Preserve which enters Bear Creek at the sharpest bend and has formed the small natural bridge called Portland Arch

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<sup>6</sup> Available on the internet at: <http://www.in.gov/dnr/fishwild/5457.htm>.



- Blue River from the confluence of the West and Middle Forks of the Blue River in Washington County downstream to its confluence with the Ohio River
- The South Fork of Blue River in Washington County from the Horner's Chapel Road bridge downstream to its confluence with Blue River.
- Lost River and all surface and underground tributaries upstream from the Orangeville Rise (T2N, R1W, Section 6) and the Rise of Lost River (T2N, R1W, Section 7) and the mainstem of the Lost River from the Orangeville Rise downstream to its confluence with the East Fork of White River.
- The Blue River in Washington, Crawford, and Harrison Counties, from river mile 57.0 to river mile 11.5
- The North Fork of Wildcat Creek in Carroll and Tippecanoe Counties, from river mile 43.11 to river mile 4.82
- The South Fork of Wildcat Creek in Tippecanoe County, from river mile 10.21 to river mile 0.00
- Cedar Creek in Allen and DeKalb counties, from river mile 13.7 to its confluence with the St. Joseph River
- The Indiana portion of the open waters of Lake Michigan
- All waters incorporated in the Indiana Dunes National Lakeshore.



## **Attachment 2: Critical Wetlands and Critical Special Aquatic Sites**

In the interest of maintaining consistency with the State Regulated (Isolated) Wetland program established at 327 IAC 17, IDEM defines Critical Wetlands and Critical Special Aquatic Sites to be synonymous with Rare and Ecologically Important Wetland Types under 327 IAC 17-1-3(3)(B):

- **Acid bog:** Acid bog is an acidic wetland of kettle holes in glacial terrain. Bogs can be graminoid (*Carex* spp. and *Sphagnum* spp.) or low shrub (*Chamaedaphne calyculata* and *Betula pumila*). The graminoid bog can be a floating, quaking mat. The soils in acid bogs are saturated and acidic peat. Bogs have non-flowing or very slow flowing water. The water level fluctuates seasonally. When a sphagnum mat floats, it rises and falls with the water table. Acid bogs can be found in northern Indiana.
- **Acid seep:** Acid seep is a bog-like wetland typically found in unglaciated hill regions. This community is a small groundwater-fed wetland located primarily in upland terrain. A thin layer of muck may lie over a mineral substrate. The soil reaction is acid. This seep community is characterized by flowing water during at least part of the year. Acid seeps are located primarily in southern Indiana.
- **Circumneutral bog:** Circumneutral bog is a bog-like wetland that receives groundwater. Circumneutral bogs can be a mosaic of tall shrub bog, graminoid bog, and other communities. The graminoid bog often occurs on a quaking or floating mat. Although a few bogs occur in unglaciated regions, most are found in glacial ice-block depressions. The soils in circumneutral bogs are usually peat, or other low nutrient organic substrates, which are saturated and circumneutral to slightly acid. Circumneutral bogs have non-flowing or very slow flowing water. The water level fluctuates seasonally. Circumneutral bogs are usually found in northern Indiana.
- **Circumneutral seep:** The circumneutral seep (or seep-spring) is a groundwater-fed wetland on organic soil. It is primarily herbaceous. Species typically include marsh marigold (*Caltha palustris*) and skunk cabbage (*Symplocarpus foetidus*) with a scattered tree canopy. Circumneutral seep is typically situated on or near the base of a slope. The soil is typically circumneutral muck. This seep community is characterized by slowly flowing water during at least part of the year. Circumneutral seeps can be found scattered throughout Indiana.
- **Cypress swamp:** Bald cypress swamps are seasonally to permanently inundated wetlands found in depressions and sloughs of large bottomlands associated with the Wabash/Ohio River system. Poorly to very poorly drained soils characterize this environment. Bald cypress (*Taxodium distichum*) is present, and green ash (*Fraxinus pennsylvanica*), silver maple (*Acer saccharinum*), and overcup oak (*Quercus lyrata*) are also usually present. This community is restricted to extreme southwest Indiana.
- **Dune and swale:** Dune and swale is an ecological system consisting of a mixture of upland (black oak sand savanna, dry to mesic sand prairie) and wetland (pond, panne, sedge meadow, marsh, wet prairie) natural communities. These



communities occur in long, narrow, linear complexes, with the dry communities occupying sand ridges, and the wet communities occurring in the intervening swales. Black oak (*Quercus velutina*), paper birch (*Betula papyrifera*), jack pine (*Pinus banksiana*), and prairie vegetation typically occur on the ridges, and sedges, reeds, and marsh/aquatic vegetation line are found in the swales. Water levels are directly influenced by ground water, with the interdunal swales controlled largely by lateral flow through porous beach ridges. Dune and swale is restricted to extreme northwest Indiana, near Lake Michigan.

- **Fen:** Fen is a calcareous, groundwater-fed wetland. Fens are often a mosaic of grassy areas, sedgy areas, graminoid-shrubby cinquefoil, and tall shrub areas. The extent of the tall shrub component of fens may be determined by fire frequency and/or soil moisture. Drying of the soil increases the growth of shrubs. Fens typically occur in the vicinity of glacial moraines. Fens typically have a muck or peat substrate. The water level fluctuates seasonally and is fed by groundwater. Fens can be found in central and northern Indiana.
- **Forested fen:** Forested fen is a tree-dominated wetland on organic soil which receives groundwater. Forested fens are often a mosaic of treed areas, tall shrub areas, and herbaceous areas. A tall shrub layer is often well developed in forested fens. Indicative species typically include tamarack (*Larix laricina*), black ash (*Fraxinus nigra*), yellow birch (*Betula alleghaniensis*), poison sumac (*Toxicodendron vernix*), and red maple (*Acer rubrum*). Forested fens occur in wet lowlands, where moraines meet outwash features or depressions. Forested fens have saturated, poorly to very poorly drained soils that are often muck, but some seasonal flooding can occur in forested fens that are especially level. This community is a late successional stage of fen or circumneutral bog. Forested fens occur in northern Indiana.
- **Forested swamp:** Forested swamp is a seasonally inundated to intermittently exposed wetland of large river bottoms. Forested swamps do not receive direct flow from river flooding except under exceptional circumstances. Forested swamps occur in depressions, sloughs and large bottomlands, typically dominated by tree species such as swamp cottonwood (*Populus heterophylla*), green ash (*Fraxinus pennsylvanica*), and swamp white oak (*Quercus bicolor*). In northern Indiana important tree species include black ash (*Fraxinus nigra*), yellow birch (*Betula alleghaniensis*), and red maple (*Acer rubrum*). Poorly to very poorly drained and aerated soils characterize the swamp environment. Soils usually are mineral not muck or peat. This community type is found throughout Indiana.
- **Marl beach:** Marl beach is a fen-like community located on the marly muck shorelines of lakes. Marl precipitate is evident. A thin layer of water is present in spring, but dries down in summer. Draw-down of a lake creates additional area for this community to develop on. Marl beaches can be found in extreme northern Indiana, primarily in the northeast.
- **Muck flat:** Muck flat is a shoreline and lake community possessing a unique flora of sedges and annual plants, many of which are also found on the Atlantic and Gulf Coastal Plains. This community is found at the margins of lakes or covering shallow basins. This community has a peat substrate. The muck flats can float on the water surface, but during high water periods are usually inundated. The water level of a

basin fluctuates during a season or from year to year in response to the amount of precipitation. This exposes bare substrate needed for germination by species of the community. Muck flats are found in northern Indiana.

- **Panne:** Panne is a groundwater fed herbaceous wetland occupying interdunal swales near Lake Michigan. Pannes are located on the lee side of the first or second line of dunes from the lakeshore. The soil is wet, calcareous sand. Pannes are located in counties bordering Lake Michigan.
- **Sand flat:** Sand flat is a shoreline and lake community possessing a unique flora of sedges and annual plants, many of which are also found on the Atlantic and Gulf Coastal Plains. This community is found at the margins of lakes or covering shallow basins. This community has a sand substrate. During high water periods sand flats at the margins of lakes or ponds are inundated. The water level of a basin fluctuates during a season or from year to year in response to the amount of precipitation. This exposes bare substrate needed for germination by species of the community. Sand flats occur in northern Indiana, and in the Plainville Sand Section of southwest Indiana.
- **Sedge meadow:** Sedge meadow is an herbaceous wetland typically dominated by graminoid species such as flat sedge (*Cyperus* spp.), spike rush (*Eleocharis* spp.), rushes (*Juncus* spp.) and sedges (*Carex* spp.). Sedge meadow is an herbaceous wetland of stream margins and river floodplains, and lake margins or upland depressions. Streamside sedge meadows are frequently flooded in the spring and early summer. Sedge meadows of lake margins and depressions often contain standing water during wet months and after heavy rains; during dry periods, the water level is at or just below the substrate. Sedge meadow usually occupies the ground between a marsh and the uplands, or a shrub swamp or wet forest. Periodic high water can kill trees and shrubs invading sedge meadows. Sedge meadows can be found in the northern half of the state.
- **Shrub swamp:** Shrub swamp is a shrub-dominated wetland that is seasonally inundated to intermittently exposed. This community occurs in depressions and the substrate in either mineral soils or muck, as opposed to peat which is characteristic of bogs. Shrub swamp is characterized by non-flowing or very slowly flowing water with levels that fluctuate seasonally. Shrub swamps are persistent, though considered successional. Two opportunistic native shrubs, sandbar willow (*Salix exigua*) and gray dogwood (*Cornus racemosa*), by themselves, are not indicative of shrub swamps. This community type is found throughout Indiana.
- **Sinkhole pond:** Sinkhole ponds are water-containing depressions in karst topography. Sinkhole ponds are found in the Mitchell Karst Plain in south-central Indiana.
- **Sinkhole swamp:** Sinkhole swamps are depressions in karst topography dominated by tree or shrub species. Sinkhole swamps are found in the Mitchell Karst Plain in south-central Indiana.
- **Wet floodplain forest:** Wet floodplain forest is a broadleaf deciduous forest of river floodplains. Wet floodplain forests occur in depressions and flats on narrow to wide floodplains and also on recently exposed substrates that are frequently flooded. Wet

floodplain forests are frequently flooded and may have standing water seasonally to permanently present. Wet floodplain forests occur statewide.

- **Wet prairie:** Wet prairie is an herbaceous wetland typically dominated by graminoid species such as prairie cordgrass (*Spartina pectinata*), bluejoint (*Calamagrostis canadensis*), and sedges (*Carex* spp.). Vegetation height is often 2-3 m. The species diversity of wet prairies is lower than that of mesic prairies. Wet prairies occur in deep swales and the substrate ranges from very deep black mineral soils (which are high in organic matter) to muck. Ponding in spring lasts for several weeks prior to drainage. Wet prairies commonly occur in the Grand Prairie Natural Region, the Tipton Till Plain and the Bluffton Till Plain, with a few examples found in the Northern Lakes Natural Region.
- **Wet sand prairie:** Wet sand prairie is an herbaceous wetland typically dominated by graminoid species such as prairie cordgrass (*Spartina pectinata*), bluejoint (*Calamagrostis canadensis*), and sedges (*Carex* spp.). Vegetation height is often 2-3 m. The species diversity of wet prairies is lower than that of mesic prairies. Wet lowland prairies occur in deep swales and the substrate is sand, sometimes mixed with muck. Flooding is a regular springtime occurrence in wet sand prairie and may last several weeks. This community occurs in a mosaic with marsh and other wetlands, and with upland prairies and sand savannas. Fire was frequent occurrence, but more common in the fall when waters had receded. This community occurs in northwest Indiana and in the Plainsville Sands area.

# **APPENDIX F**

Form 96



# CONTRACTOR'S BID FOR PUBLIC WORK - FORM 96

State Form 52414 (R2 / 2-13) / Form 96 (Revised 2013)

Prescribed by State Board of Accounts

## PART I

*(To be completed for all bids. Please type or print)*

Date (month, day, year): \_\_\_\_\_

1. Governmental Unit (Owner): \_\_\_\_\_

2. County : \_\_\_\_\_

3. Bidder (Firm): \_\_\_\_\_

Address: \_\_\_\_\_

City/State/ZIPcode: \_\_\_\_\_

4. Telephone Number: \_\_\_\_\_

5. Agent of Bidder (if applicable): \_\_\_\_\_

Pursuant to notices given, the undersigned offers to furnish labor and/or material necessary to complete the public works project of \_\_\_\_\_  
(Governmental Unit) in accordance with plans and specifications prepared by \_\_\_\_\_  
\_\_\_\_\_ and dated \_\_\_\_\_ for the sum of  
\_\_\_\_\_ \$ \_\_\_\_\_

The undersigned further agrees to furnish a bond or certified check with this bid for an amount specified in the notice of the letting. If alternative bids apply, the undersigned submits a proposal for each in accordance with the notice. Any addendums attached will be specifically referenced at the applicable page.

If additional units of material included in the contract are needed, the cost of units must be the same as that shown in the original contract if accepted by the governmental unit. If the bid is to be awarded on a unit basis, the itemization of the units shall be shown on a separate attachment.

The contractor and his subcontractors, if any, shall not discriminate against or intimidate any employee, or applicant for employment, to be employed in the performance of this contract, with respect to any matter directly or indirectly related to employment because of race, religion, color, sex, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

### CERTIFICATION OF USE OF UNITED STATES STEEL PRODUCTS

*(If applicable)*

I, the undersigned bidder or agent as a contractor on a public works project, understand my statutory obligation to use steel products made in the United States (I.C. 5-16-8-2). I hereby certify that I and all subcontractors employed by me for this project will use U.S. steel products on this project if awarded. I understand that violations hereunder may result in forfeiture of contractual payments.

## ACCEPTANCE

The above bid is accepted this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, subject to the following conditions: \_\_\_\_\_

Contracting Authority Members:

_____	_____
_____	_____
_____	_____

## PART II

(For projects of \$150,000 or more – IC 36-1-12-4)

Governmental Unit: \_\_\_\_\_

Bidder (Firm) \_\_\_\_\_

Date (month, day, year): \_\_\_\_\_

These statements to be submitted under oath by each bidder with and as a part of his bid.  
Attach additional pages for each section as needed.

## SECTION I EXPERIENCE QUESTIONNAIRE

1. What public works projects has your organization completed for the period of one (1) year prior to the date of the current bid?

Contract Amount	Class of Work	Completion Date	Name and Address of Owner

2. What public works projects are now in process of construction by your organization?

Contract Amount	Class of Work	Expected Completion Date	Name and Address of Owner

3. Have you ever failed to complete any work awarded to you? \_\_\_\_\_ If so, where and why?

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4. List references from private firms for which you have performed work.

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## SECTION II PLAN AND EQUIPMENT QUESTIONNAIRE

1. Explain your plan or layout for performing proposed work. *(Examples could include a narrative of when you could begin work, complete the project, number of workers, etc. and any other information which you believe would enable the governmental unit to consider your bid.)*

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2. Please list the names and addresses of all subcontractors *(i.e. persons or firms outside your own firm who have performed part of the work)* that you have used on public works projects during the past five (5) years along with a brief description of the work done by each subcontractor.

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3. If you intend to sublet any portion of the work, state the name and address of each subcontractor, equipment to be used by the subcontractor, and whether you will require a bond. However, if you are unable to currently provide a listing, please understand a listing must be provided prior to contract approval. Until the completion of the proposed project, you are under a continuing obligation to immediately notify the governmental unit in the event that you subsequently determine that you will use a subcontractor on the proposed project.

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4. What equipment do you have available to use for the proposed project? Any equipment to be used by subcontractors may also be required to be listed by the governmental unit.

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5. Have you entered into contracts or received offers for all materials which substantiate the prices used in preparing your proposal? If not, please explain the rationale used which would corroborate the prices listed.

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### SECTION III CONTRACTOR'S FINANCIAL STATEMENT

Attachment of bidder's financial statement is mandatory. Any bid submitted without said financial statement as required by statute shall thereby be rendered invalid. The financial statement provided hereunder to the governing body awarding the contract must be specific enough in detail so that said governing body can make a proper determination of the bidder's capability for completing the project if awarded.

#### SECTION IV CONTRACTOR'S NON – COLLUSION AFFIDAVIT

The undersigned bidder or agent, being duly sworn on oath, says that he has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting nor to prevent any person from bidding nor to include anyone to refrain from bidding, and that this bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

He further says that no person or persons, firms, or corporation has, have or will receive directly or indirectly, any rebate, fee, gift, commission or thing of value on account of such sale.

#### SECTION V OATH AND AFFIRMATION

I HEREBY AFFIRM UNDER THE PENALTIES FOR PERJURY THAT THE FACTS AND INFORMATION CONTAINED IN THE FOREGOING BID FOR PUBLIC WORKS ARE TRUE AND CORRECT.

Dated at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
(Name of Organization)

By \_\_\_\_\_

\_\_\_\_\_  
(Title of Person Signing)

#### ACKNOWLEDGEMENT

STATE OF \_\_\_\_\_ )  
COUNTY OF \_\_\_\_\_ ) ss

Before me, a Notary Public, personally appeared the above-named \_\_\_\_\_ and swore that the statements contained in the foregoing document are true and correct.

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
Notary Public

My Commission Expires: \_\_\_\_\_

County of Residence: \_\_\_\_\_

**BID OF**

\_\_\_\_\_  
(Contractor)

\_\_\_\_\_  
(Address)

**FOR**

**PUBLIC WORKS PROJECTS**

**OF**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Filed \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_

Action taken \_\_\_\_\_

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\_\_\_\_\_